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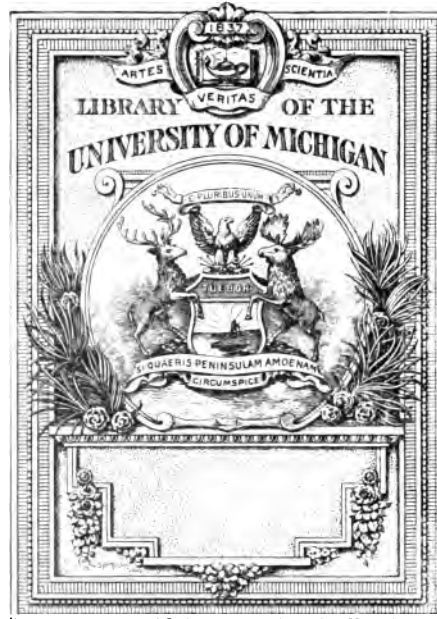
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**AVENARIUS
AND THE STANDPOINT OF
PURE EXPERIENCE**

BY
WENDELL T. BUSH, PH.D.
Lecturer in Philosophy in Columbia University

**ARCHIVES OF
PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS**

EDITED BY
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INTRODUCTION

A FEW words in explanation of the following essay may not be out of place. When I first wrote down the matter of the essay, some six years ago, I was dissatisfied with the metaphysical alternatives from which the student of philosophy could select. The study of the writings of Richard Avenarius heightened my dissatisfaction with previous metaphysics, and suggested to me a point of view for a fresh start. It seems to me that discontent with established and professional metaphysics has become quite general and that a fresh start is very generally desired. Well, the only sound thing to start from is actual experience, experience not viewed through the assumptions and dialect of previous systems, but taken in an absolutely empirical fashion. We must make the effort to beg as few questions as possible at the outset. If we are rigorous enough we shall discover just what questions we have to beg and why we beg them.

This return to the empirically given is the standpoint of 'pure experience.' 'Pure experience' means at present a point of view. It is premature to speak of a philosophy of 'pure experience'; we do not yet know what such a philosophy will have to say. But there can be no question that the point of view is the right one, and it takes something of a struggle to win it. And as I came to the point of view through Avenarius, the essay includes the attempt to restate, in a relatively independent fashion, what seem to me the essentials of his doctrine.

There are not, however, as there might seem to be, two lines of effort neither united nor clearly distinguished. I think I may claim to express the views, or at least the attitude, of Avenarius all the time. An account of the philosophy of Avenarius is a difficult matter, not because the thought is obscure or hard to follow, but because it is expressed in an elaborate and novel terminology which can hardly be omitted altogether, but which, if introduced to any great extent into an exposition, certainly gets between the reader and the thought.

I have been encouraged in this undertaking by the fact that no good account of Avenarius exists for English readers. The article by Carstanjen in *Mind*¹ is altogether too slight. In German,

¹ October, 1897.

Wundt's criticism¹ is marked by a hostile polemical spirit that effectually interferes with its usefulness. In French, however, the articles by Delacroix² are not unsuccessful, but they hardly show how much can be gotten out of the works reviewed.

I have spoken of this essay as the effort to reach a point of view, and such an effort must have reference to present philosophical tendencies. Every student of metaphysics has got to take account of idealism, and take account of it logically. Idealism claims to rest upon demonstrable facts of experience, and to be a strictly logical deduction. The really candid critic must inspect experience as impartially as he can, and see whether the premises of idealism are really all that they claim to be. That is, the critic must place himself at the standpoint of pure experience, and putting theories and definitions out of his head, must get acquainted directly with those aspects of experience which will later constitute the basis of a philosophy.

This effort to appreciate experience in an undistorted way, to take it as it comes, not checking the coming by asking metaphysical questions, but simply trying to see what comes, is what concerns the first section of the essay. As the duty of squaring myself with idealism looms in the background, it is the independent outer world aspect of experience that interests me most. The thesis of my first section is that naïve realism is a perfectly correct description of experience as such, but that this does not make it a true metaphysical theory of existence. It may be true and it may not.

As experience we have the world with all its empirical detail. It interests us and we want to know about it. We can feel two kinds of curiosity about the world. We can, on the one hand, wish to become better and better acquainted with its empirical character, or we can conceive it as a whole and ask what is the cause or ground or nature of the whole in view of which we shall interpret and comprehend the parts that come within our ken. The first type of interest desires description of experience, the second desires an explanation of experience, and the second and third sections of the paper are entitled, respectively, 'The Description of Experience' and 'The Explanation of Experience.'

The complete description of experience is the task of all the special sciences working together, and recently there has arisen in scientific circles a point of view which regards the concepts of science, such concepts as atom, ether, energy, etc., as conceptual instruments for effecting convenient descriptions or increasing our fund of empirical data, but it is not regarded as of the smallest

¹ *Philosophische Studien*, Bd. 13, Heft 1, 2 and 3.

² *Revue de Métaphysique et de Morale*, Vol. V., p. 764, Vol. VI., p. 61.

consequence for the purpose in hand, that anything corresponding to these concepts actually exists. If, however, one asserts that atoms really exist, or that reality is constituted in one way or another, then one has passed to the plane of metaphysics. It is clear, then, that the logical distinction between science and metaphysics appears in this, that metaphysics, the endeavor to know 'reality,' needs the predicate of existence, while science does not.

The question arises, why should not he, to whom the concept of an Absolute seems demanded by the facts of experience, treat this concept as the physicist treats the concept of the atom? And so far as I can see there is only an emotional reason why he should not do so. For the question is not whether there is reality, but whether in a given concept we have a true account of it.

Now metaphysics is anxious to be 'scientific' in every possible way, and among students of metaphysics we have those who are cool-blooded and critical, and those who warm to their tasks with emotional energy. It should not be in the least surprising if the former type of philosopher follows the example of science, and the second type alone continues to cling to the existential predicate. And in view of the great and increasing prestige of science, metaphysics, in the sense above explained, may become of less and less consequence in the world of thought. And if this comes to pass, as there is much reason to expect, we shall have science and the natural view of the world which we find in pure experience. This would be a verification of the predictions of Avenarius.

The fourth section, entitled 'Suggestions toward a Concept of Experience,' proposes a point of view which might be of service to the student of history, particularly the student of the history of theories of reality. This follows the theory that Avenarius has put forward in his essay 'Der Menschliche Weltbegriff.' It is a concept of a history of 'pure experience,' beginning in an animistic stage of culture and continuing until the animism which at the beginning had the character of undoubted fact, has been entirely eliminated from experience and from theory. The contention of Avenarius is that when this process of rejecting animism is completed, the theory of idealism must disappear. This concept is the concept of a genuine history, in which theories of reality have been determined by the fund of animism not yet rejected.

Finally, in the fifth and last section, I take up some contemporary discussions of pure experience. Professor William James has recently published his conviction that consciousness as a kind of stuff or entity does not exist. He believes that in dropping the idea of such an entity he is getting rid of the last remnant of the idea of the soul. To one who has in mind the theories of Avenarius,

and the concept of a history of pure experience such as that just explained, this statement from Professor James must seem of great consequence. What are the results of this for idealism? is the imperative question. I have done what I can to indicate the results that seem to me likely to follow, and my position is that the rejection of consciousness from the position it has hitherto occupied in metaphysics must follow from a candid inspection of pure experience, and that this cuts the ground from under the argument for idealism. I thus exhibit at least the presumption that the conception of a history of pure experience, which I take from Avenarius, is sound.

APPRECIATIONS OF EXPERIENCE

I

It often happens in philosophical discussion that the idea of an experience that is valid or logically justifiable leads us to forget or ignore our actual experience. That a type of experience should be apparently illogical and illusory is enough oftentimes to dismiss it from consideration. In what follows, I wish to speak not of valid experience as such, but simply of average human experience which may be naïve and illusory but which is not therefore less genuine.

I am not concerned with any metaphysic. I do not purpose to justify any experience as against any other, but simply to state some of the commoner characteristics of frankly naïve and spontaneous experience, and to mention some logical considerations that seem relevant. And if from time to time the habits of language may cause it to appear that I am discussing a metaphysical question, I would beg the reader to recall that my real interest is in characteristics of human experience simply, detached as completely as may be from any notion of reality.

Each one of us can say, 'Here I am in a world of things, among my fellows.' Whether in our philosophical moments we believe in a world of independent external objects and of different external selves is another matter. However illusory its appearance, the outer world does seem to be a world of facts, whose reality is not dependent upon our cognition. Reflection may show that this appearance is highly ambiguous, and that such an independent reality can be neither comprehended nor described,—but the appearance persists. All sorts of things happen or seem to happen without any help from humanity,—things which humanity would be only too glad to help if it could. Independent facts and forces there seem to be which man can take advantage of to his profit. The farmer plants his crops and they grow, not without his care, to be sure, but chiefly by virtue of something which he does not seem to contribute. There is falling water to turn a mill wheel, metals there are to be dug from the earth, heavenly bodies to be searched out with the telescope, germs of disease to be avoided. One who has never heard of metaphysical realism has nevertheless a completely realistic attitude.

This is the attitude of the 'plain man.' The philosopher is rather fond of contrasting himself with the 'plain man,' and since he is interested in the contrast-effect, he is apt not to observe how much

he and the 'plain man' have in common. His ideal of a logical or valid experience causes him often enough to be somewhat indifferent to important characteristics of actual experience.

Both the philosopher and the 'plain man' are obliged to take the universe very much in the same way. Whether we are philosophers or not, our adjustment to our world of objects is as though these were genuinely independent of us. This seems a commonplace that scarcely needs even to be alluded to. Yet I trust I may be pardoned for dwelling a little longer on the 'plain man.' He is an instructive individual who seldom comes by his rights in philosophy.

The 'plain man,' if asked for his opinion on the merits of realism, would be at least so sure of its case that he would be unable to comprehend any other point of view. His would be, indeed, a very poor metaphysic, and likely enough quite in error, but this humble realism would express with great energy how the world comes home to the natural unsophisticated man. "You ask me," we may imagine him saying, "how I know that the world out there is independent of me and of everybody else. I know it by experience. Don't my crops grow, whether any one thinks about them or not? Do you suppose I have anything to do with the change of the seasons? I've never seen Spain and South Africa, but I know there are such places, and it wouldn't make any difference if Spain and South Africa didn't contain a living soul, and if everybody else, the Lord Almighty included, should forget there ever had been such places; Spain and South Africa would stay just where they are. You needn't try to tell me it's all in my mind's eye." Something like this the 'plain man' would surely say.

And then we might talk to him of secondary qualities and brain-states and categories. To all of which he would reply with simple and eloquent disgust. Most of his reasons might be as poor as they could be, but the poorness of his reasons would not weaken his sturdy faith precisely because they have little or nothing to do with it. He never inferred or demonstrated to himself the existence of an independent external world. He has always known such a world because he has always lived in it,—it is the world of his experience, that is, his experience is characterized in that way.

One of the first and most important steps to take in an epistemological discussion of experience is to free one's terms, experience, knowledge and the like, from metaphysical implications which solve in advance problems which might be later proposed. This precaution is so important that I will illustrate the neglect of it by a few sentences from an article by Professor Andrew Seth.¹

¹ *Philosophical Review*, Vol. I., p. 511, 'The Problem of Epistemology.'

Professor Seth has been stating what he regards as the most important features of the idealistic theory of knowledge, and he declares that for idealism, the object of knowledge 'is nothing beyond the cognitive states themselves.' And he continues: "Now on such a theory it is pretty evident that the distinction of knowing and being, of subject and object, would never have arisen and would not have required, therefore, to be explained away."

It seems even more evident, however, that if the distinction of subject and object were not a primary character of experience, it could not play the rôle it does in theories of knowledge. And just as the subject-object distinction is more original and primitive than any theory of knowledge, just so the experience of the outer world is more original and primitive than any metaphysic. And by this I mean, not that the outer world exists, but that experience has a certain characteristic feature.

II

These introductory remarks have sought to separate experience from validity in the ordinary sense. I wish now to consider what we may fairly mean by saying that a thing or a fact is given in experience. The 'plain man' says he knows by experience that the outer world has its own independent existence. I 'know' by experience all sorts of facts about my fellows, and I know by experience that I have real fellows. At the same time I admit that a true metaphysic might, for all I know, show me that quite the opposite is true. Still, that makes no difference to my experience. We all know, I presume, by experience what happened to us yesterday. These various facts and many more, we say, are given in experience. But they may not be 'presented' in experience. A presented object is an object directly and immediately perceived, and of course must be an object 'given' in experience, but many objects of the class I call 'given in experience' could not possibly be 'presented.'

Such objects are the thoughts and feelings of my fellow and the past event. Yet speaking unphilosophically, perhaps, but honestly, we say that these are facts of our experience given in experience, known through experience.

I dwell upon the point, obvious though it is, because when we say a fact is given in experience we are so apt to mean presented to perception. To bring something to the test of experience is to produce it for direct inspection. But to define an object of experience in this way, as an object perceived or at least capable of being perceived, is to divorce the concept of experience hopelessly from the life that it is intended to describe. There is no ground for denying that the pious mystic may know God and the Saints -

as facts of his experience. And accepting experience in this large empirical way, we must admit as objects of it, facts which could not be presented, which could not, perhaps, even exist. And because the point is so fundamental, let me repeat myself.

Every one would say that the presence of his fellows was given to him in experience. We should all instinctively pronounce it the idlest of philosophical vagaries, were I to devote time and paragraphs to proving that this paper is addressed to a real circle of readers, and if I were really in any doubt about it I should be declared simply insane.

Yet we do seriously discuss how we come to believe in the presence of other selves, and how we can rationally justify the belief. There is something a little futile, perhaps even a little insincere, in such discussion. We do not 'come to believe' in other selves at all. It is misleading to inquire into our 'belief' in other selves. Other selves are simply facts,—not reality-facts, perhaps, but experience-facts. Our belief (if I may still use the word) in other selves is in no proportion to our success in explaining or rationalizing the belief. In this effort we may succeed, or we may fail; our neighbor is in either case an equally genuine fact in our experience. Yet the essential part of this fact, the life of feeling and ideas and will, all, indeed, that makes him our neighbor, we can not possibly perceive. But the presence of it all about us is so much a fact of experience that without it any one would probably go mad. Whatever the psychological process may be by which human experience becomes social, it has, from the earliest times we can remember, the social character.

The fellow being is one type of an object of experience that can not be presented to perception. Another type is the past event.

Suppose I say to some one, 'Did you go to any of the operas last winter?' And I receive the answer, 'Yes, I did go'; and I reply, 'Are you quite sure? Perhaps you didn't.' I may be answered as follows: 'I distinctly remember going. I remember all about it. I can tell you just who sang and where my seat was.' The declaration amounts to saying that it is a fact of present experience that one did go to the opera some time ago. Surely it is a fact of present experience to each of us that he has done many particular things on days that are past. Yet we are not now doing the individual things we did yesterday. Facts of experience these past events are. Presented immediate facts they are not. We have, to be sure, immediate data about them, but the past event is obviously never presented in experience at all. Mental images, recollections, echoes of its sense, character, may be presented, but these are not the original event, and there may conceivably have been no original event.

It may seem that we have not come far toward stating what we may fairly mean by saying that a fact is given in experience. We have at least made out that the test of perception is not a sufficient one. Some objects seem to be facts of experience, when the ideas of them come home to us in a certain way, when they have what has been called 'reality feeling.' Even an object of sense-perception needs the tone of reality in order to be quite unambiguous. One can at least ask the question, 'Is this a real house or the illusion of a house, which I see?' An hallucination may be all but perfect, and differ from a genuinely perceived object only in its tone of reality. "An hallucination," says Professor James, "is a strictly sensational form of consciousness, as good and true a sensation as if there were a real object there."¹ The poor tinker Sly, in *Taming of the Shrew*, who for a jest is made to believe himself a lord, is the victim of a shifting reality-feeling.

"Am I a lord? And have I such a lady?
Or do I dream? Or have I dreamed till now?
I do not sleep: I see, I hear, I speak;
I smell sweet savours, and I feel soft things:
Upon my life I am a lord indeed
And not a tinker, nor Christophero Sly."

To sum up. For a fact to be an object of experience it is not necessary that it be perceived or be of a sort that could possibly be perceived. It is not necessary that it exist or be of a sort that could possibly exist.

III

I have suggested 'reality-feeling' as the sort of criterion that may help us to characterize an object of experience. In spite of all the uncertainties of experience we say it is the surest basis of knowledge and the only foundation for theory. *A priori* knowledge, if there be such, I include within experience. To have an object of experience is to know that object in some respect. The object may not exist, but that makes no difference to the experience that 'knows' it. What I wish now to examine is the relation of 'reality-feeling' to knowledge as a case of experience.

The discussion thus far has been carried on from the point of view of Avenarius and here I shall attempt some account of the way in which Avenarius describes the experience of knowing something. His opinions will illustrate important phases of our problem, and bring out the empirical detail of the situation with which we have to deal.

Avenarius gives an elaborate analysis of the feeling-tones which

¹ William James, 'Principles of Psychology,' II., p. 115.

may give character to ideas,—such feelings as congruity and incongruity, familiarity and strangeness, the various ways in which an idea may be satisfactory or unsatisfactory. His special purpose leads him to bring out as clearly as possible the contrast in feeling-tone between a problem solved and a problem unsolved, between the sense of having attained insight, and of being still baffled and barred from insight.

We have been made familiar with groups of terms which are used to characterize what we call the 'real.'¹ Professor Royce has collected such terms into three groups expressive of three attitudes toward reality. One of these attitudes lays stress on the aspect of immediacy as characteristic of the real. The real is what we can get at, and test and get directly acquainted with. Another attitude, as Professor Royce describes it, emphasizes the character of permanence, of substantial self-sufficiency. The unreal has no 'depth' or 'interior constitution,' 'but the real abides in its own house.' One may detect here a sense of independent existence as giving character to the real. I hasten to say that I am alone responsible for this interpretation. In a sense, however, this aspect of independence is the aspect of existence *par excellence*. Finally, a third class of terms describes the real as what can be depended upon, what will not leave you in the lurch. We can be sure of the real, but the unreal is a sham and not to be trusted.

In a similar way Avenarius describes three feeling-tones as characteristic of what we accept as real and true.² These he calls the 'existential' character, the 'acquaintance' character and the 'security' character. The references just made to the analysis given by Professor Royce are a sufficient explanation of these three very similar aspects which Avenarius has picked out.

Avenarius unites these three characters into what he calls the 'fidential' character. His meaning seems to be that that which is felt to be real in a persuasive and convincing way is that with which we feel ourselves most at home. The real is reassuring, we feel that we understand it as we understand an old friend. It is not strange and baffling. The unreal is '*unheimlich*,' something to which we can't get adjusted, and which, therefore, does not have a place in our world of truth. This 'fidential' character Avenarius explains by the term '*Heimhaftigkeit*,' and he quaintly says that every real problem is a kind of *Heimweh*,—the desire to get back into the region where we feel at home, by reducing our uncomprehended data to terms of known data.

The term 'reality-feeling,' with which we are so familiar, is a

¹ Royce, 'The World and the Individual,' Vol. I., p. 52.

² 'Kritik der Reinen Erfahrung,' Vol. II., p. 32.

sufficiently good equivalent for the 'fidential,' and in our discussion may be substituted for it. The important thing to notice, however, is that when we get these three attitudes, or three feeling-tones, or better, when we get all the reality-feeling and reality-attitude that Professor Royce and Avenarius both describe, we have got what we were looking for. At least experience has no other test by which thought can recognize its goal.

Experience means for Avenarius what I have attempted to mean by it. The subject of the experience in question merely observes the situation before him and reports it, but there are no implications about real objective facts in what he reports, except for him who reports the facts of experience. The facts reported may be wholly mythological, but to be objects of experience they must characterize experience by their apparent reality, and the observer must be quite unaware of having in any way produced the facts out of himself or contributed anything to determine their character. He simply observes and reports.¹ This account of an object of experience we frequently have implied in the insistence of people who have seen apparitions, that they were not dreaming, that they tell simply what they saw, that it was as plain as day, etc.

Whether Luther ever hurled his ink-bottle at the devil or not, or whether '*der alt böse Feind*' ever became to him a visual object, Luther's experience may well have been characterized by the reality of the devil as an actual person. The experience of many thousands of persons is no doubt characterized by the efficiency of holy relics to cure disease. The friendliness of disembodied souls, miracles of the saints, the existence of God, can all be objects of experience. That is, experience is adjusted to the reality of these things, just as our experience is adjusted to the reality of our fellow of whom we can get no glimpse whatever. But we sometimes awaken from the cognitive dream. We do so all the time in trivial ways, as when one seeks for his purse or his keys, and finds he has left them at home. But in the case of ideas which play large dramatic rôles in life the change, when it occurs, is gradual. But the change *can always* occur, and that is the important point.

We are familiar with the distinction of the 'What' and the 'That.' Avenarius distinguishes what we may call the 'What' and a variable 'That.' There is a certain content, imagined or perceived, and there is my attitude toward it, by which I characterize it as certainly known, or as believed, or as probable, or as doubted, or as disbelieved and rejected. Every cognitive experience includes these two factors. There is a content, and the content is the object of an attitude. The content, Avenarius designates as elements; the

¹ 'Kritik der Reinen Erfahrung,' Vol. II., pp. 352 and 356.

attitude of knowledge, doubt, belief, etc., he calls a character. "If I observe that I first presumed or guessed something, then believed it and finally knew it, I have, in the relation content-character, the content as constant and the character as variable. If I observe what different things I have believed in at different periods of my life, I have the character as constant and the content as variable."¹ Evidently, experience appears in this distinction as a character, for in the question, did you experience that, or did you imagine it or dream it? the idea of experience stands for certainty, sure knowledge of fact.

The shifting value of the reality-feeling is readily illustrated by the religious questionings and doubts of many persons. At the outset there is frequently no question about God at all; everything is sure, and as yet unquestioned. No question has ever occurred, just as no genuine question has ever occurred about the reality of my fellow being. It is misleading to say that one believes in this stage. One simply knows. There is perfect adjustment, perfect satisfaction; no problem appears anywhere. There is an experience of genuine insight. Many persons who go through painful religious experiences start from a situation like this, others always remain in it,—others attain to it. It is our attitude toward our intimate friends,—we know them, we are sure of them, they are the most real facts in our lives.

But this condition of perfect mental and organic stability does not always continue. The time comes when one *believes* in God,—one no longer claims direct insight and certain knowledge. God exists, yes,—one is sure of that, and one is sure of God,—but one doesn't know so many things about God. The 'fidential' is beginning to be attenuated. God becomes more and more an object of doubt; if not less knowable, at least less known, and known about, and therefore not to be depended upon with the same quiet assurance as before. Finally one asks the question does God exist, anyway? The idea began as the idea of something that was an object of experience and knowledge, with nothing problematic about it. Then the reality-feeling began to fade. The idea took on a slightly problematic tone, it became problematized, and this problematic quality became more and more characteristic. The idea is different somehow, a little strange. A quality of difference or otherness has come over it. Finally what was known and experienced as real turns completely into a problem. And then the problem gradually ceases to exist. The idea of God is at last understood to be a superstition to be explained on historical and anthropological grounds. The idea has become deproblematized. And yet God was at the

¹ Avenarius, 'Der Menschliche Weltbegriff,' p. 1.

start *known* to exist. At least we have not the slightest ground for denying that experience was characterized by the existence of God as an object of will attitudes.

Psychologically this means probably that the physiological system comes into the best adjustment to its environment by means of this idea, or else that the idea expresses such an adjustment. Avenarius likes to say that the central nervous system attains a condition of stability, poise, rest, and that a complete cognition is the expression of such stability. Into his elaborate psychophysical account I do not need to go, but it is important to notice how an idea may express a genuine object of experience and how experience may become less and less characterized by this object, until it is no longer an object of experience but has become an object of critical reflection; after which it may be comprehended in one way or another, as fact or as myth.

Political convictions often have a similar history. One *knows* at the start that a high tariff, perhaps, is the only salvation of national industries. There is no question about it,—one can't be said to believe, for one actually knows all about it. Presently one thinks one doesn't know quite so much, but one believes the former doctrine. And afterward one may veer quite to the other side, and if one is of a dogmatic temperament one may *know* that various things are so which one formerly knew were not so. And in each instance it is a genuine case of knowledge. Formerly, the soul was an object of experience and knowledge. To-day it has almost ceased to be a problem. It was once a matter of experience that the earth went around the sun. No doubt witchcraft was repeatedly a matter of experience in early New England history. There is really no limit to the impossible things that may be objects of experience. They may not continue very long to exhibit this empirical certainty, but while they pass themselves off as genuine facts, they are facts of experience, that is, experience has that character. One of the most helpful bits of terminology that Avenarius has hit upon is what he calls the problematization of an idea.¹ He means that the idea assumes a problematic character which it may retain or it may lose by being again understood, in which case, the idea is said to be 'deproblematized.' Any idea, any fact you like, may become problematized or deproblematized.

Let me give one more illustration of the cognitive process, in the spirit of Avenarius. We are in a street-car, and at the opposite end of the car is a man whom we recognize as a friend. We are just about to go to speak to him when we suddenly hesitate. Is it really our friend Smith? Perhaps it isn't. He looks like Smith

¹ 'Kr. der R. Erf.,' II., p. 225.

though,—but he doesn't look so much like Smith as he just now did. After all, he doesn't look like Smith, it can't be Smith, it isn't Smith;—but who is it? Perhaps it's Jones; it looks like Jones; of course it's Jones.

Now whether the man is Smith or Jones or some one else makes no difference to the process of arriving at the judgment, 'That is Jones.' The man was first seen and he had a familiar look about him,—he was characterized by a quality of sameness, he is the *same* man as the one I know as Smith. Then this sameness quality diminishes,—the man feels to us less and less *the same*,—he takes on a problematic character, we are in doubt and we worry over the problem who it can be. Then we reach a negative certainty,—the man is certainly not Smith. He has taken on a quality of difference or otherness. Gradually this negative certainty passes over into a positive attitude. Another quality of sameness appears. The man may be Jones. The sameness quality grows stronger until we are certain he is the same man as Jones. With this certainty the man has lost the problematic character.

At this point either motor results follow, we rise and speak to the man Jones, or we turn our thoughts to other things. We do not worry any longer over the problem of the man's identity. We have found that out. But who the man really is, is a fact outside the knowing process and irrelevant to it.

It is this irrelevancy of outer fact that I want to insist upon. If it makes any difference to the kind of process and experience of knowledge, then it is not irrelevant, but so long as that experience which claims to be knowledge is quite the same in its own positive character, whether it happens to be in error or not, it seems like a metaphysical distinction and not a merely descriptive one, to call *some* apparently cognitive experience genuine knowledge, and refuse this name to other such experience because in the course of events it has to be recognized as error. I therefore define knowledge, provisionally at least, as experience with the cognitive character. Other cognitive experience may drive it out, but it does not cease to be knowledge until that happens.

IV

One is perhaps inclined at this point to protest against a misuse of words. We do not normally use the word knowledge to mean merely an experience which has a cognitive feeling. By knowledge we mean *knowledge* and not perhaps error that feels like knowledge. Truth and error, it is held, are two radically different things, and knowledge means the possession of truth and it can not mean the possession of error. This is the traditional attitude.

I admit that the point of view I here defend uses the word knowledge in a novel way, which may be a little confusing. But the habit of declaring that knowledge must be knowledge of outer fact, and then to say that epistemology investigates knowledge, is to declare an important problem solved by a mere fiat before beginning. Or put differently, there must be a transsubjective object of knowledge, otherwise there would be no knowledge for epistemology to investigate; but we have epistemology, therefore we have knowledge, therefore we have the transsubjective objects of knowledge. Perhaps we have, but it is to beg the most fundamental of questions to assume the transsubjective objects in our definition of knowledge. We have cases of experience which we say are cases of knowledge. As types of experience, they must be distinguished by experience qualities. These experience marks are precisely what they are, whether there is any knowledge of transsubjective things or not.

I quote a few sentences from Professor Seth for the sake of stating more clearly what I think epistemology ought not to be. He says: "Epistemology may be intelligibly described as dealing with the relation of knowledge to reality."¹ Again: "This reference of ideas to a world of reality beyond themselves is what is meant when knowledge is contrasted with reality." Also: "Now it is the essential function of epistemology to deal with this very relation, —to investigate it on the side of its validity, its truth."²

All this is, I think, what epistemology should not try to be, at least at the beginning. It all follows, however, from including a metaphysical validity in the definition of knowledge. It should not be forgotten that our *total data* are experience characterized one way or another, and that when we speak of truth and error as something secured, we can mean only certain types of experience. But any piece of experience is properly described by pointing out its own positive characters, and not by a subsequent estimate of its value. Actual cases of knowledge are cases of experience characterized as cognitive. And to the experience which said, 'I am knowledge,' subsequent observation can always say, 'You were error.' But from the point of view of a strictly empirical account, the experience now called error was, so long as it retained the cognitive character, a genuine case of knowing something.

V

No doubt I seem to have mixed up experience and knowledge in a confusing way. I began by speaking of objects of experience,

¹ *Philosophical Review*, Vol. I., p. 133.

² *L. c.*, p. 136.

facts given in experience, and then I slipped into a discussion of knowledge, and it may seem that sometimes I used knowledge and experience as equivalent terms, and again, I spoke of knowledge as a special type of experience, namely cognitive experience.

The criticism would be fair, but it is of service in pointing out that there are two meanings of the word experience, and these I must now try to separate.

Most often we mean by experience, something as wide as the whole of consciousness. There is no defining experience in this most comprehensive sense. No feeling, however elusive, falls outside of experience. Experience means also, however, something more limited and definite. In this narrower meaning, experience is the experience of some particular object or fact. We express this meaning of the term when we say to any one, 'Did you experience that or did you imagine it or invent it or dream it or postulate it?' Experience in this sense is the cognition of apparently real fact. It is in this sense that Avenarius uses the word. He defines it as the '*Kenntnissnahme seiender Sachen*.'¹

A near-sighted person frequently sees some one across the street whom he thinks must be an acquaintance, but he can not be sure, owing to his defective eyesight. In this case, and speaking from the point of view of the narrower definition, the object of his experience is his own state of uncertainty. He can not say, 'I perceive my friend A. over there,' but he can say, 'I perceive great uncertainty in myself.' The latter judgment is a complete cognition. His uncertainty is fact of his experience, but his experience does not present it as fact that the man across the street is really his friend. It is this cognitive character of experience that we have in mind when we speak of experience as the basis of science, when we speak of facts, of experience and objects of experience. Any discussion of experience as a criterion of certainty must conceive it in the narrower sense, as direct cognition of fact, without, however, implying that the fact has any metaphysically independent existence. It may or it may not. In either case we have the same empirical situation. I shall accordingly use the word experience to mean experience cognitive, experience having an object.

I trust it will not sound either dogmatic or excessively commonplace if I say at once that the independent outer world is an object of experience.

VI

It has been already observed how we meet again and again with the declaration or the insinuation that knowledge of a real transcendent is the only knowledge worth the name, and at the same

¹ 'Kr. der R. Erf.,' II., p. 359.

time it is admitted that we can not understand how experience can transcend itself. But experience has got to do so somehow, it is argued, or else knowledge is impossible.

In all this, a philosophical doctrine is seen to meet resistance from something that is not logical thought. The problem of the transcendent object can hardly get a hearing on its own merits. It is met by thoroughly realistic prejudices, which seem to be planted deep down in our nature. This attitude of resistance to certain perfectly logical points of view is something deeper than the sentimental antipathies to a criticism of cherished ideas. It expresses that law of experience which a psychologist is trying to make out when he seeks to discover why we believe in an outer world. Certain it is that there is a law of our experience which makes the outer world, whatever we may say about it, or whatever logical dilemmas we may get into on account of it, always an equally real fact as a constant character of experience.

It would be interesting if cases of experience could be observed in which the outer world should lose its reality-feeling, in which the subject would hesitate to say whether the outer world were really experienced or only fancied and dreamed. If such cases could be observed, and their phenomena connected with physiological disturbances, we might see our way clear to speak with great confidence of a natural view of the world, determined by organic conditions and expressing the natural adjustment of the organism to its conditions of life.

Pathological cases of this type have in fact been observed.¹ I am obliged to quote at second hand.² Dilthey writes as follows: "There is in dreams a shading of the liveliness of the sense of reality. This occurs in the experience of every one, and by it dream-images can come very close to reality. For a long time I took a memory-image for the image of an actual event, until I was able to prove that it was the recollection of a dream-image. From Krishaber we have the following description, given by an educated patient, of his condition which lasted a considerable time. The account is from Krishaber's observations of a certain class of neuropathic conditions of which profound sense-disturbances were especially characteristic: 'The impression of being in a dream was the most trying to me of all. A hundred times I touched objects about me, I spoke out loud in order to bring back the reality of the outer world and my own identity. But the touching of objects did not correct my impression.' Another case of this type was observed

¹ Krishaber, 'De la Nervopathie cerebro-cardiaque.'

² Observations by Krishaber cited by Dilthey in *Sitzungsberichte der K. P. Akademie der Wissenschaften zu Berlin* für 1890, Vol. 2, p. 1004.

in the case of an officer, who lost at the same time the lively sense of his own identity and of the reality of the outer world, and had the feeling of being sunk in a dream." Again, "In all the cases collected by Krishaber, the patient suddenly fell a victim to dizziness, roaring in the ears, and disturbances of sight, hearing and touch. An especially accurate observer of himself says: 'These disturbances of sight reminded me of how things look when seen through powerful concave lenses, or when one stands beside a very hot furnace and looks through the draft, so that the objects beheld seem to tremble. My own disturbances of sight resemble a combination of these two.' The disturbances of hearing were even more pronounced. And every time there proceeds from these altered conditions, especially from the sense-disturbances, an alteration in the sense of the reality of the outer world, and a parallel change in self-consciousness."

The patient first observed was a writer. After violent sense-disturbances he seemed to be dreaming and no longer the same person. Both his own identity and the outer world became matters of uncertainty to him. Another case was that of an English officer. "It seemed to the patient that something was wrapped about him and stood as a barrier between him and the outer world, giving him a feeling of complete isolation. When he spoke, his voice seemed strange, he did not recognize it or believe it was his own. . . . He doubted his own existence. He seemed to be not himself, and it cost him an effort to believe in the identity of his own person. At times he was not sure of his existence, and at the same time he lost belief in the reality of the outer world, and was as if sunk deep in a dream." It seemed to a third patient as though persons about him were figures in a dream. He thought he was no longer the same person, and as he walked he was unable to feel the floor.

I cite these cases to support the opinion that the experience of an outer world is rooted in the very organization of our being. Just what these deep-lying roots are is a special problem for psychology, but the fact that such experience does express some essential factor in our organization justifies us in speaking of a natural view of the world as contrasted with the idealistic point of view. For although we may not be justified in comparing crude organic attitudes with any reasoned metaphysic, still these natural attitudes of adjustment give rise to the naïve realism of the 'plain man,' and this it is on which a reflected realism depends.

The proposal of the problem, how we come to know an outer world, as a problem for empirical psychology, does seem to contain the implication that such experience expresses the natural adjustment of the physiological subject.

Helmholtz¹ thinks to solve the problem by applying his doctrine of unconscious inferences, and in this opinion he is followed by Zeller.² Dilthey, in the article from which I have quoted, argues that the subject meets stubborn resisting facts which are thereby characterized as other than self. The subject gets segmented off, as it were, from the rest of the world. Cornelius explains the idea by the 'principle of economy.'³

Of these various efforts, that of Dilthey is decidedly the best, —but however that may be, all I wish to insist upon here is that experience is characterized by laws of its own in a profoundly realistic way, a way which may be of the greatest consequence for the actual fate of metaphysical theories. By no amount of intellectual discipline can we rid our world in experience of its realistic character. We may be fully convinced that this character is a vicious illusion, but the character remains. Dr. Johnson did not refute Berkeley's metaphysic, but he did testify to the character of experience which is common to sane humanity. The lecturer who is going to present to his class a refutation of realism at least takes naïvely for granted that his lecture-room is waiting for him in quite a realistic way. Realism of this unreflective sort describes our adjustment to our world of experience. It is our natural organic attitude toward our outer world. And the student of philosophy who has this same natural attitude along with the rest of his fellows may, indeed, vigorously repudiate any charge of being a realist in his philosophy, but he and his fellows will have a world of common objective reference, much of which will have a material character, and which, emotional values being neglected, seems pretty much the same for all observers. As a philosopher, he will hardly be so sure about his doctrine as the unreflective man is about the world of his experience. But although he may pass through crises of critical philosophy, he has to reflect about a world that persistently retains its realistic character. It may indeed become more or less ambiguous in certain respects, it will alter with regard to the emotional values in it, but these changes do not affect the outer substantial reality as a characteristic of experience. Such realism as this can hardly be called a metaphysical realism. It is certainly quite independent of any metaphysical doctrine. It is an organic experiential realism that seems a great deal more fundamental than realism or idealism in critical philosophy.

In presenting this point, the chief difficulty I have to contend against is its character of extreme commonplace. The habit, how-

¹ 'Physiologische Optik,' Leipzig, 1867, p. 447.

² 'Vorträge und Abhandlungen,' III., p. 253.

³ 'Psychologie als Erfahrungswissenschaft,' p. 114.

ever, of seeking reality in some other world of ideal truth causes us to leap over the delusive and illogical but the very real experience of actual life. But except, perhaps, for the mystic in his moments of rapture, this seeking a beyond does not change the character of human experience that I have laid stress upon, so that as a philosopher a man may be anything you like, but as a man, living the life of a human being, he is bound to be a realist in his spontaneous organic attitudes. These, of course, are not philosophy, but they determine the character of experience, which is the basis of philosophy.

What I have been trying to bring forward is the fact of what has been called a natural view of the world, a natural *Weltbegriff*¹ as contrasted with a relatively artificial one resting on a foundation of dialectical subtlety. The latter we may believe and preach, but the former we live. The subtle and critical doctrine *may* be the true one, *but it makes no difference to experience whether it is true or not.*

I trust this will not appear far-fetched and trivial. To me, it appears at the other extreme of commonplace. I dwell upon it so much because of our habits, as students of philosophy, of neglecting experience which seems illusory from our favorite point of view.

There is then a natural view of the world, a natural attitude toward it, a natural illusion if you like, from which we may possibly be delivered by moments of profounder insight. But our experiences of philosophic grace are like many other experiences of grace; one comes at pretty regular intervals, perhaps, into the temple, but one continually relapses into sin. It is just about impossible to continually recognize in the outer world the garment of divinity. We have very probably our 'philosophy of clothes,' but it is pretty certainly a philosophy of Sunday clothes.

This natural view of the world which seems so appropriate to the organism in a biological way is that natural attitude which Avenarius has discussed in his essay 'Der Menschliche Weltbegriff.'

A few sentences in that book are so striking that I venture to quote them. He has been speaking of the idealistic movement which issued in the proposition, "The world is my idea" (*Vorstellung*), and he continues: "But even for the most advanced idealist who seeks to limit his idea of the world to this minimum of content, there remains always the recollection of 'things' as they used to be before his conversion to idealism,—as something really existent, or as he used to call them real, as something immediately sure, as immediately cognized, and known and knowable,—as parts of his environment independent of his thought, in contrast with himself and set over against his thought.

¹ Avenarius.

"This recollection is, however, not so void of significance for the most critical idealist as is the recollection of a nurse's tale or a belief of childhood; it plays a wholly peculiar rôle. . . . And this means that the '*problem*'¹ which arose when it was 'discovered' that the perceptions which were caused by the 'things' of the earlier (realistic) view are indeed nothing but ideas, and that the 'things' too of the earlier view are only ideas, this means that the '*problem*' which arose by virtue of this discovery has not yet found its final solution by our becoming accustomed to the judgment, everything is my idea, is in my consciousness.

"And why not? Because of the despised naïve realism which always lives anew because it is always being experienced (*der immer neu auflebt weil er immer neu erlebt wird*). And so the ghost of realism stalks by day in the proud mansion of idealism, and will not be cast forth."²

Whatever those functions are which cause us to believe so instinctively in the outer world, we must assume they are continuously active. The pathological cases mentioned above showed that the sense of reality which attaches to the outer world is a product of natural human functions, and these, unless disorganized, must cause our experience to be characterized as experience in a real independent world of objective facts.

The above considerations show that at least one view of the world seems to have a functional value for the organism, while others are functionally less suitable. If there be one view of the world which surpasses others in functional value, this means that the organism through this *Weltbegriff* secures an adjustment to its environment and a stability within itself. As a fact, some points of view do seem to have this functional value. We sometimes hear it said, 'That point of view would turn my world upside down' or, 'I could not get ahead on that supposition.' But whether suggestions like these be worth anything or not, there is evidently a natural view of the world, the only view the 'plain man' knows, and which is as deeply rooted in the experience of the critical idealist as in that of any one else. That view is practical naïve realism. As metaphysic, it is of course of the most uncritical type. But it can be a stubborn obstacle in the way of idealism, producing a sense of incongruity, and occasioning that vague discontent with a doctrine which is admitted to be perfectly logical. "I believe,"³ says Avenarius, "from personal observations that there is a large class of men trained in natural science who are at the same time idealists,

¹ See meaning of '*problem*' in above account of Avenarius, pp. 12 and 13.

² '*Der Menschliche Weltbegriff*,' p. 106.

³ *L. c.*, p. 108.

who would feel it a relief to return to their earlier realism, and would be happy to have it occur if they only knew how to escape from idealism logically, with a good conscience." But they can not escape the conclusion that consciousness and its phenomena are all that is given in experience. "And yet with all these consistent deductions there is usually not lacking a dualistic discontent. Something about this view of the world is wrong and were better got rid of. One can't just say what the disturbing factor is, in this so strictly logical *Weltbegriff*."¹

Avenarius has his own explanation, but we need not go so far as his theory of 'introjection' would take us in order to see that idealism, whether it be true or not, seeks to have us view the world in a way that is opposed to our organic constitution. Avenarius would say that idealism is thus biologically untenable (*'biologisch unhaltbar'*).

There is then a natural view of that experience which we call the outer world, just as there is a natural view of that experience which stands for our fellow being. And it is not strange that natural views of these things should regard them as being really what they seem to be, transcendent realistic facts.

The critical philosopher is the man who seeks to emasculate his natural view of the world. Of course, in so doing, he may be getting nearer to metaphysical truth. He will have a greater or a less success in obeying the commands of reason, but he can hardly eliminate altogether the influence of his natural organic attitude. So that the 'critical' doctrine which results will be a compromise between nature and reason. I do not say that this is an interference with the function of critical doctrines; far from it.

But not every one is a critical philosopher; relatively few do emasculate their natural view of the world. I venture to say that even the majority of philosophers have the same quiet assurance about their outer world, that the plain man has, although they can state more problems about it. For the greater part of humanity, the realistic nature of the world is a simple fact of experience, and for the rest, whatever they may say about it, it is a fact of experience, too. Those for whom it is not a fact of experience are the cases referred to above whose reality-functions, if I may call them so, have become disorganized.

VII

We mean by realism a conception which describes the world as consisting of mutually independent objects. The 'independent' as thus used has a metaphysical meaning. But the idea of metaphys-

¹ 'Der Menschliche Weltbegriff,' p. 109.

ical independence has its origin in an aspect of things which is found in experience, and which is called their independence. There is certainly an aspect of a large part of the world which, as an experience-character must be called independence, and in order to distinguish between this empirical character and the metaphysical meaning, I shall use the two words 'independent' and 'transcendent.' The transcendence-character is a metaphysical character, the independence-character is a strictly empirical one. We instinctively regard our fellows as transcendent objects. They may be or may not, but they are certainly independent objects. In speaking of independent objects I shall therefore not be speaking metaphysically. And as for transcendent objects, I shall discuss not them but the idea of them.

This distinction between the independent and the transcendent is an important one. It does not, however, occur at all to the 'plain man,' nor does it occur to the rest of us most of the time. For him who is unconcerned with philosophical problems, the independent object is a transcendent object. He will not doubt that the church, the city hall and the bank stand up on their foundations without any assistance from experience, finite or absolute.

I hope this will not seem like attributing reflective metaphysical opinions to the man who is understood not to reflect at all along these lines. He does not, of course, distinguish the independent and the transcendent and then say they are two aspects of one and the same object. He has no such ideas at all clearly formulated, but he has very definite ideas about 'real things' which are not asking his permission to exist. He has, perhaps, left a plough up in the field. He is certain that the plough is just where he left it, unless some one has taken it away. Doubts about the transcendent reality of his plough would be quite unintelligible to him. And since he does not distinguish the independent from the transcendent character, his plough has both characters undistinguished. To say that he does indeed accept the independence-character, since he must, but that he can not be said to believe in the transcendence-character, is to say that he understands by the independence-character the limitations we have in mind, when we describe this character as a 'merely' empirical character. But this is to credit him with a distinction which not many writers on epistemology have thought of making.

I think we may be sure of these conclusions because there is so much of the 'plain man' in each of us. When we talk philosophy we do indeed steer a very different course, but when we simply experience the world we are all plain men together. That is, we are all thrown back on those natural functions which determine experience for us in these respects.

I regard it then as no betrayal of the 'plain man' to say that for him the transcendent object is an object of experience. But this does not mean that there need be anywhere in the universe a metaphysically transcendent object. For the spontaneous unreflective consciousness, the independent object has not been denuded of the transcendence-character. One has become highly sophisticated before one calls a tree or a house a construct of consciousness. From the naïve point of view, there is, of course, consciousness, but that is all in one's head, if one must locate it. That tree, however, is not consciousness, or a phenomenon of consciousness. It is a tree, and trees are 'known' to be something quite different from consciousness.

The critical onlooker says, to be sure, that the tree and the house are independent objects, but that this character is no ground for describing them as transcendent as well. The critical onlooker is, however, outside of the situation, and his observations do not, as such, alter the experience which he criticizes.

The only writer who, to my knowledge, has been clear and specific as well as just on this point is Uphues.¹ Uphues does not distinguish the independence from the transcendence-character in so many words, but he implies the distinction. Accordingly, in the quotation from him which I shall give, '*das Transcendente*' is to be understood in the above undifferentiated sense of independent object still unreflectively apperceived as transcendent.

"*Die Natur*," says Uphues, "*ist das Jenseits des Bewusstseins, der Gegensatz desselben, und in diesem Sinne bezeichnen wir sie als das Transcendente.*"² A little farther on, he continues: "It depends upon the constitution (*Einrichtung*) of consciousness, that in sensations, and in ideas and thoughts built up upon them, we do present to ourselves something wholly different from consciousness. . . . The direction of consciousness upon the transcendent object is originally the only one that can be observed. The child makes no reflections upon consciousness and its processes. The world perceived by the senses is the only object with which it is at all concerned. This direction of consciousness upon the transcendent object is in later years, if not the only one, at least the prevailing one. Very many remain on the child's level; reflections about the processes of consciousness play in their lives no rôle whatever, and even for the others, such reflections are an achievement laboriously brought about, interrupting at times the practical business of life with the outer world. More important it is that when we make judgments about the transcendent object, we do not proceed in an

¹ 'Psychologie des Erkennens,' Leipzig, 1893.

² Uphues, *l. c.*, p. 66.

arbitrary way, but follow the laws which are laid down by our own nature."¹

This direction of consciousness upon the 'transcendent' object is certainly one of the most fundamental characteristics of human experience. It is the original distinction between subject and object which Professor Seth finds so inconsistent with an idealistic theory of knowledge. Uphues repeatedly observes, however, that to describe an act of perception as characterized by the presence of an (apparently) transcendent object is to say nothing whatever about the transcendent existence of such an object.

This should suffice to make clear in what sense the transcendent object can be an object of experience. Why it is that the independent object should be characterized as transcendent as well is a psychological question. But the fact that the independent object is so characterized is the point to observe.

VIII

Of all our independent objects the one that is most stubbornly and defiantly transcendent is our fellow. It is just the transcendent side of him which seems to give purpose and value to actual concrete life, and which gives him the peculiar position of fellow. Whether he is *really* a transcendent object, I do not inquire, but human experience has precisely the character which the transcendent reality of fellow beings would confer upon it,—that is, it is characterized as a social experience. It has a history of development by means of social relations, and a particular method of profiting and learning by these relations, which the psychology of imitation has done much to describe. But the describer of this social experience is in the same position as he who describes the act of perceiving a house or a tree. In neither case are we logically obliged to assume the transcendent object otherwise than as a character of experience, the experience in which the perception takes place.

Assuming the reality of my fellows, they form with myself something more nearly comparable to a colony of monads than to anything else, monads which have no windows through which we can get direct views into one another's habitations, which may, therefore, conceivably have no inside, but may be like the painted architecture of the stage.

This is, of course, a solipsistic account of the matter, a solipsistic description of a social experience. And if any one urge that a social experience must needs involve at least two currents of personal experience, I think he has misunderstood. It is the same

¹ 'Psychologie des Erkennens,' p. 69.

metaphysical *petitio* that lurks in the usual definitions of knowledge and error.

For a solipsistic doctrine is a very different thing from a solipsistic experience. Suppose a solipsistic account to be true, and that my stream of consciousness is the only stream of consciousness. My social experience is quite indifferent to the truth or falsity of solipsism, just as my experience of the outer world is quite indifferent to the truth or falsity of idealism. The important thing for experience is how it is characterized, not what exists outside of it. Our human experience is characterized as life in a real world among real fellows, but it does not follow from this merely that any trans-subjective outer world or transcendent fellow beings exist in a trans-subjective way. The fact remains that the denial of solipsism (and we all deny it) defines the fellow being as metaphysically transcendent and this is to put him in the same logical position with relation to the perceiving subject as the house or the tree. On the other hand, the experience itself must be described as equally social, whatever results we come to on matters of theory.

In view of these considerations it is interesting to note how writers shy away from solipsism. They appear to imagine that a solipsistic doctrine means an experience in which fellow beings are represented by thin ghostly shapes, phantoms, which have the character of phantoms. What I insist upon is that a solipsistic doctrine implies nothing whatever as to how the experience under discussion will be characterized. One who was sure of the logical correctness of the solipsistic argument would discuss his doctrines with others, submit to social tests and social demands, and this, I maintain, would not be any repudiation of his solipsism.

The fact simply is that his experience would be characterized by the natural view of the world, the natural *Weltbegriff* of Avenarius. Whatever doctrine the person in question may have, the reality of fellow beings and the outer world is a fact of his experience. He adjusts himself to them as thus defined; that is his natural attitude, it describes his experience, although it may not describe anything else.

A discussion of solipsism is always a thankless task. Both the writer and the reader know in advance that nothing can be said in such a discussion that will in any way alter their actual experience. We all regard it inevitably as a mere vagary of dialectic of which the absurdity is too manifest to call for careful statement.

Of the 'absurdity' of solipsism I am well aware. I know as well as any one that a solipsistic doctrine, however faultless its logic, however unquestionable its data, would make no difference to me as an interpretation of experience. I am sure that others would

be equally indifferent. This fact, however, that a solipsistic doctrine can make no real difference to us points to an aspect of experience which deserves examination. I feel obliged, therefore, to dwell a little longer on solipsism, in spite of its uncongenial character.

Since solipsism is so manifestly absurd, its refutation ought to be easy enough. It might pursue the following method: When you argue for solipsism observe, pray, the kind of situation you appeal to. You admit that your experience has the character of a social experience. But you deny that there is a genuine system of experience which proceeds from the interaction of different selves. You maintain that in your universe there exists only one self which is yourself. At least you insist that no other can be observed. Obviously you appeal to an observation which is not subject to the limitations of your own observation. You place yourself in thought above the entire fact to be observed, and then you see all there is and report accordingly. But to establish the correctness of your report another observation will be necessary, and then this observation must be criticized by a third, and so on. It is the infinite process with the last judgment not a bit nearer the goal than the first one. To establish a solipsistic doctrine, you must have an observation which can overlook the whole situation, and then one of two things happens. You either get into the infinite regress, or you admit that the observation you appeal to is really an observation of the facts, and that if the facts include a system of different selves, the observation can be a recognition of that fact. But your observation must not be a kind of experience which we know nothing about. When you appeal to an imagined observation, it must be the sort of fact that you understand and apply the name to in your own experience. But such an observation could be no more authoritative than your own observations every day. Your social experience is a continuous observation of the very kind you would appeal to to report the delusiveness of that experience. So that you either admit the sufficiency of every-day experience as a refutation of solipsism, or you appeal to an observation which can not observe.

Now we all 'know' that the case against solipsism is a great deal better than any argument like this makes it appear. One who should try to argue for a positive solipsism could be answered in the above way. But solipsism need not be positive, it need not assume any burden of proof. The defender of solipsism may proceed as follows: "You mistake my purpose; I am not trying to prove the truth of solipsism. I say merely that the situation is ambiguous and capable of two explanations, and I see nothing but sentiment which obliges me to reject the solipsistic one. I insist also that in the reality of our fellow being we have the same problem of a transcendent object that we have in the case of a house or a tree."

Now if you admit difficulties in the way of knowing the transcendent as such, those difficulties as difficulties of logic apply to the fellow being. I admit readily the infinite regress as the result of an attempt to prove a positive solipsistic doctrine, but the infinite regress occurs there because it must occur with every attempt to know a transcendent object. The infinite regress simply illustrates that aspect of the situation which I call attention to. What one gets in any case of knowledge is experience characterized as cognitive, and the presumed agreement between such cognitive experience and its assumed transcendent object can not be got at. We can not go back of the cognitive experience, although we can go from one cognitive experience to another. To be sure, I have continually a cognitive experience of my fellows, but this does not settle the question of their transcendent character *in any logical way*. It does satisfy me practically,—this whole discussion is academic if you like, and this sort of practical satisfaction is a decidedly important phase of experience. But logically we are left with a sort of negative solipsism on our hands which we can not get rid of. Actually, we simply toss it away. We can not stand that kind of suggestion. Our whole being rebels. We simply banish solipsism out of court. But I submit that this is not a logical nor a philosophical way of escape.

I am not here, however, to argue the claims of one metaphysic or another. I wish simply to observe, if I can, what motives determine our philosophical decisions.

Perhaps the most common way of attacking solipsism is to enumerate the many dreadful consequences which ought to follow. Such argument does, perhaps, make him against whom it is directed feel rather foolish, but it is no better as logic than the *argumentum ad hominem* ever is.

It seems as though the consequence of defining the object of knowledge as a transcendent object whose reality does not depend on being known brought one into a logical *impasse*. It is not that I think I am the only self in the universe, but that I do not see any way to prove that I am not the only self. Of course I know there are other selves all about me; that is the way my experience is characterized; but if I once realize that my experience can not go beyond itself, and that my fellow is regarded by me as in his very essence a transcendent fact, I then observe that my knowledge of other selves as transcendent is not a logical knowledge, but rather a biological attitude.

Meanwhile this discovery makes absolutely no difference to experience. It continues to be as social as ever. One goes about one's work and lives out one's life in the world among one's fellows. One has observed, perhaps, that one can not prove that solipsism is

logically impossible, but that that does not disturb one. One does not say that solipsism as a logical possibility is inconsistent in such and such respects. One says it is absurd and revolting; that is, one substitutes esthetic categories for logical ones.

I have raised the question about solipsism in order to bring out the way in which the experience of all of us is superior to logic. We all draw the line with great emphasis at the fellow being. His reality must not be brought into question. We can perhaps discuss it as a problem, but we know that it will not be a real problem. We know that our experience is characterized in a social way and that this social character is all-important in our world of values. The fact that a character of experience is simply a character of experience and can in no way turn into a transcendent thing is not allowed to make any difference.

IX

Realists do not take kindly to considerations like the preceding. Such discussion sounds like argument for subjectivism. The realistic prejudice already referred to demands the transcendent object. What I have called the independent object is not enough. A few attempts to support this demand may be here briefly reviewed.

Volkelt writes as follows: "If pure experience were the only source of knowledge we should have to give up all claim to objective knowledge, and content ourselves with mere enumeration and description of our own processes in consciousness. Every attempt to formulate knowledge must end in failure."¹

Here we have the initial assumption in the word 'knowledge' which solves a problem in advance by a mere fiat. If pure experience be the only source of knowledge, then pure experience is a good enough basis for all the science we have, for it has no other basis, and we can continue our scientific undertakings on that one. In the statement quoted, the idea of an experience valid from a certain point of view seems to get in the way of a frank description of actual experience as such. It is felt that because a point of view seems so subjective, therefore the experience described must feel equally subjective. But this is pure assumption.

If, however, knowledge is to be a cognition of the real transcendent, and since knowledge we must have, some way has got to be found to lead from pure experience over into the transsubjective region. Accordingly, Volkelt continues as follows: "The new principle is to secure me a knowledge of the transsubjective region which is closed to experience. The certainty of this principle must, however, be grounded in experience, must find an experience in which subjective

¹ 'Erfahrung und Denken,' p. 133.

certainly forces me to conclude that in that experience I cognize something that experience itself can not reach."¹

This is a frank statement of the situation. It is an appeal to pure experience to tell something about facts which it confessedly can not touch. Suppose experience does her best to comply; in that case we have experience characterized in one way or another, in such a way, in fact, as to satisfy us. As Avenarius would say, our new experience is 'deproblematized.'

The principle by which Volkelt thinks we gain a knowledge of transsubjective things is the necessity one is under to make a particular judgment and not any other, if one wishes to tell the truth about a fact with which one is acquainted. He testifies to a constraint, a *Zwang*, which lies in the very nature of the case, a demand that the ideas be related so and not otherwise.²

One understands at once what is meant, although such terms as constraint and demand are a little misleading. When one has the insight that constitutes perfect knowledge one can, of course, report it only one way. If it is an insight which one would have been glad to avoid, there may be some sense of compulsion about it, but unless the observer has an emotional antipathy to the truth which he perceives, that truth is simply a part of his world of fact, but it can not be said to assault him with any kind of imperative. There are judgments, however, judgments of insight, which claim to have a perfectly obvious objective validity. There is a test of such validity, the test of social agreement. Volkelt tries to explain that it is this social agreement which he means by the objective validity of judgments. But so long as the success of a judgment depends upon its reporting correctly the facts about a transsubjective object, social agreement may be the test of such judgments, but it is not equivalent to their validity, except in a purely practical way. If we are to accept social agreement as validity, we must throw overboard the transcendent object. This, however, will be a mere matter of theory;—the independent objects of experience will, many of them at least, continue to be characterized as transcendent.

Volkelt tries to describe a kind of transcendental 'Must.' Rickert, with a much less realistic attitude, argues for a 'transcendental Ought.'³ His argument is somewhat as follows: Suppose I see a tree, and I perceive it to be a green tree. That perception includes the judgment, the tree is green. It would certainly be false to say that no judgment occurs until I happen to put it into words. But having perceived the green tree I am not now at liberty to de-

¹ 'Erfahrung und Denken,' p. 135.

² *L. c.*, p. 140.

³ 'Der Gegenstand der Erkenntniss,' Freiburg i. B., 1892, p. 66.

ceive myself about it. The true judgment has a kind of value which a false judgment would not have. That to which the judgment corresponds is this ought, which is authoritative for the individual.

It is enough to point out that this felt imperative is in the first place a character of pure experience, whatever else it may be.

Another subjective principle of a similar sort is Sigwart's 'Principle of Agreement.' If any one question the validity of this principle, Sigwart admits that "We can only fall back upon our consciousness that the unification of elements which agree (*viz.*, subject and predicate) is something absolutely self-evident,"¹—or in other words, that it is a fact of pure experience. But, says Sigwart, there is experience that is obviously subjective and individual, and experience which has all the character of universal validity. The latter sort of experience can be tested by certain principles such as (1) stability in the character of objects,—they are not found with one character to-day and a different one to-morrow; and (2) social agreement.² But the objective validity which depends upon these tests can get along very well without any transcendent object whatever.

A very common way of arguing for the realistic metaphysical existence of the outer world is to call in the concept of causality. There must be an outer world, it is said, as the cause of our sensations, which depend upon the stimulation of a sense organ. Sigwart's comment upon this argument is the right one. He says: "No doubt scientific reflection upon our sense-perceptions, which begins by assuming that they are occasioned by external objects, finds itself confirmed in this assumption by the fact that it is thus enabled to explain our sensations. . . . But it is, after all, convincing only after we have tacitly presupposed the existence of objects, the assumption of which it was intended to explain."³

Objective validity in the realist's sense is, then, Sigwart admits, not so obvious in any character of experience. "But," he continues, "it still remains open to us to acknowledge the existence of an external world, which is the same for all, as a postulate of our search for science and knowledge, which we can not avoid believing, although we recognize that it is not self-evident."⁴

I should put it more strongly than this. We can not help having the outer world as a fact of experience because our experience must needs be that of a human being. We may say that we doubt or that we suspend judgment, but we have all the time our natural organic

¹ Sigwart, 'Logic,' English translation, Vol. I., p. 296.

² *L. c.*, Vol. I., p. 310.

³ *L. c.*, Vol. I., p. 321.

⁴ *L. c.*, Vol. I., p. 322.

attitudes. Doubt about the outer world may express a theory, a theory that is true, perhaps, but it does not describe the fundamental character of experience.

Let me summarize briefly.

There is what we may call a natural view of the world, by which we express our organic adjustment to it. That view asserts that a real transcendent outer world and real fellow beings are objects of experience. It asserts this, not so much in the form of a doctrine as in the form of a spontaneous attitude. It is not to be assumed, however, that either realism or idealism is therefore true. This natural view of the world accepts the world as being really what it seems to be, so far as it can be observed, and not the illusory appearance of a fundamentally different reality. The work of observing the world is natural science. This natural view of the world is shared more or less unreflectively by all normal human beings. On this point I would not be dogmatic, but I believe the proposition is substantially correct. Some of us, however, have elaborated a doctrine which declares that the world as observed and as observable is appearance and illusion, and that reality is something quite different. This doctrine may be true, *but it makes no difference to experience whether it is or not*. Knowledge is a type of experience; it is experience with the cognitive character. Error is the relation in which one cognitive experience stands to a subsequent one which contradicts it. Any cognitive experience may be contradicted by a subsequent cognitive experience. There is nothing about experience which prevents such things as a personal devil or the Real Presence being objects of Knowledge. There may be insight into the future without, of course, implying that the future is going to conform itself to the insight. Always the question has been, How is experience characterized? and never, Is there a transcendent object of knowledge? But it has been pointed out that it makes no difference to experience whether there is a transcendent object or not. Experience has independent objects which it characterizes as transcendent, and it could not possibly have any more. But this conclusion involves solipsistic possibilities. These too, however, make no difference to experience, for a solipsistic doctrine is a very different thing from a solipsistic experience. Experience, whether it be one or many in the world, is such a vital, stubborn thing that it resists any and all consequences of theory. Where it seems to be affected, the theory is the product of the experience, not experience the product of the theory. We do escape from solipsism in theory, but we do so by casting it out of court. So that if I have to say why I am convinced, in theory, of the reality of my fellows, I can only say it is on the basis of the natural view of the world. But the

natural view of the world is not logic, so that the philosophy which we finally construct is a compromise, some logic, some natural *Weltbegriff*. All sorts of mythological objects may be objects of experience. We know that to different individuals and to communities in different stages of culture, very different objects are objects of experience. We frequently express our estimate of these by calling the individual insane and the community superstitious. In doing so, however, we simply set our experience over against the one which we criticize. Both are equally pure experience, though one may be a pure experience of mythological objects, and the other such an experience as we call clarified and scientific. In the growth from childhood to intellectual maturity we see, in some measure, the transition from the former to the latter. In the historical growth of a race from primitive and prehistoric beginnings to a high degree of civilization of the modern type, we see, on a large scale, the movement from the one type of *reine Erfahrung* to the other. Thus we may describe experience as a form with a variable content, or as a variable character.

This is to advance somewhat beyond the discussion as above pursued, but it brings us to the considerations which occupy the second section of this paper.

NOTE.

The term 'Pure Experience' is intended to translate the German '*reine Erfahrung*,' but the German word '*rein*' suggests 'mere,' 'nothing else than' which the English word 'pure' less readily connotes. The English term at once suggests the question, What is an unpure experience? Experience conceived not as pure is conceived not as experience simply, experience as such, but as interpreted in the light of some metaphysic. Pure experience is experience taken in an absolutely empirical way, and conceived without metaphysical presupposition. The previous discussion has attempted to give an example of taking experience in the sense of '*reine Erfahrung*,' experience without metaphysical implications. Transcendent objects may or may not exist. It is a question not of them, but of experience characterized, in this discussion, as cognitive. For the most recent and the clearest statement of the 'pure experience' position see Professor William James in the *Journal of Philosophy, Psychology and Scientific Methods*, Vol. I., Nos. 18, 20, 21, and Vol. II., Nos. 2, 7, 11; and Professor Dewey in Vol. II., No. 15, of same journal.

THE DESCRIPTION OF EXPERIENCE

I

PURE experience means mere experience, experience just as it comes, consisting of things, thoughts and relations, and these consisting of it. It is not conceived subjectively nor does it presume any particular metaphysic of an objective reality. It is the simple presence or absence of whatever is empirically present or not present. And as we are in this discussion concerned with cognitive experience, by pure experience we shall mean experience characterized as the immediate cognition of facts, which facts may be things or relations, thoughts, feelings, convictions or uncertainty.

Avenarius gives a long list of examples of experience, and although some account was given above of his way of describing experience, a few illustrations from his own pages may serve to introduce a consideration of his general undertaking: "It is an experience that the sun shone yesterday, that it was obscured on the day before, that a recent year was perhaps an unusually rainy one, or perhaps unusually dry. . . . Among people of primitive culture an individual will declare it his experience that the moon, in case of an eclipse, is holding her child in her arms, that one visits distant places in sleep, that a shadowy being with a character something like a breath (*hauchartig*) is the source of feeling and movement in the body; and that a body can exist with a soul or without it, and that a soul can exist both embodied and disembodied. Stages of culture not so far from our own have the experience that shrieking drives away the monster that darkens the sun, and that incantations drive out the evil spirit which has entered into a body. In our own civilization, the demented patient experiences the command of God to throw himself out of the window,—he will fly like a bird [if he does so]."¹

A list like this could be prolonged indefinitely, but its significance is apparent from a few examples. Every such case of experience is a case of insight. The person who has the insight is not aware that he contributes anything toward the construction of what he perceives. He is sure that he is not mutilating any facts. He reports the truth as he perceives it. The command of God, a bit of geometry, excursions of the soul, facts of chemistry or mechanics are all facts which are directly observed and reported. From our

¹ 'Kr. der R. Erf.,' II., p. 342.

point of view some reports of experience may be true reports of fact while others are not, but this is to say that experience is not necessarily valid experience. And the charge of incorrect observation must always be a character of another experience.

Now this cognitive experience can be made the object of scientific study. To say that an explanation of cognitive experience must be wholly futile because the judgments which state the explanation will themselves express only other cognitive experience is to misunderstand the purpose. The real effort in a psychophysical account of pure experience is not so much to get back of pure experience, as to get a larger acquaintance with it—to extend cognitive experience so as to include judgments about cognitive experience itself. Of course we explain cognitive experience by reducing it to cognitive experience, but this is our way of getting a fuller and richer cognitive experience. Whether we employ psychophysical concepts or mere introspection is a question of method. Because psychology makes extensive use of psychophysical concepts, and speaks of an outer world as the source of stimuli, psychology is not therefore metaphysics. Psychology has its point of view and its favorite method. Its data are observed data. Its aim is to observe other data. Any instruments which lead to richer observations are legitimate, and do not commit the psychologist to a metaphysic just because the aim is to come around again to another observation, and not to rest in the concept of an ultimate ground of phenomena which can not be observed.

II

This, however, is the distinction between description and explanation as ultimate goals. We may say that the aim of science is the widest possible acquaintance with phenomena, where the word phenomena does not imply the metaphysical distinction of appearance and reality. Methods of observation appropriate to different regions of phenomena, and points of view for the apperception and orderly synthesis of phenomena, are developed. In the course of this work of observation and description various points of view are elaborated which have the function of explaining phenomena rather than of synthesizing and describing them, although both explanation and description may be accomplished. A point of view which both explains and describes is the principle of evolution. A point of view which as yet can be said only to explain is the reference of mental states to physical processes in the brain as the ground of consciousness. This latter point of view it is which has brought forth the much-discussed concept of psychophysical parallelism. At the risk of digression, a brief orientation on this concept will clear the ground for considering the application which Avenarius has made of it in his '*Kritik der Reinen Erfahrung*.'

We know of course that a great deal of consciousness depends upon brain-conditions. If we could make out these brain-conditions for given mental states, we should, to the extent we had done so, succeed in explaining the latter. We are able to explain many phenomena of consciousness in a general way. It is an explanation, though a very incomplete one, to say that a sufficient blow on the head puts an end to consciousness, to say that the sensations of sight or hearing or the power of speech can be eliminated by accidents of a given type to the brain. Well,—explanation is interesting. No one is obliged to take explanatory points of view if he does not wish to explain, but if he cares for the explanation of mental states he must assume that they are explainable. He must look for causal connections wherever they can be found, and not conclude that on the whole he will not look for causal connections in precisely the region where, to a certain extent, they leap at the eyes.

Just why certain physical processes should have phenomena of consciousness as sequences no one pretends to say,—but the same mystery exists in all causal relations. If one ask why the stream of consciousness continues to flow, why it didn't stop a minute ago instead of keeping on, one can only say it is because the heart continues to beat, the blood to circulate, and the brain to function. One can ask, if one has the courage, why the earth doesn't stop in its orbit, or why the sun doesn't stop shining. The fact simply is that consciousness keeps on in its dramatic and picturesque career, and if we wish to explain some details of that career, we look for laws of regularity between antecedent and consequent, and we assume, as a point of view that clears the ground and simplifies the problem, that consciousness is explainable in all respects, so far as the facts themselves are concerned. And whether one talks of antecedent and consequent or of parallel states seems hardly to matter at all.

In consciousness, such phenomena as the noon whistle of a neighboring factory, the sound of a man shoveling coal, a bicycle-bell, a piano across the street, the rattle of a wagon, may follow one after another. All sorts of sensations are continually starting up in consciousness in the most chaotic fashion. Any causal connection between *them* is out of the question. But this means that if sensations are explainable at all, they are explainable by something that is conceived as consisting of something else than psychic states. But if the mental states are conceived as depending upon physical states, and these latter as causally related, we get the mental states indirectly into a real series, and get rid of chance.¹

This is a point on which psychologists have done a good deal of hedging, no doubt because psychology is still open to the suspicion

¹ See Münsterberg, 'Aufgaben und Methoden der Psychologie,' p. 117.

of entertaining metaphysical motives. Wundt will not admit any causal connection between the physical and psychical series; each seems to flow on regardless of the other, but somehow bound to take notice of the other after the fashion of a preestablished harmony.¹ His article, 'Ueber psychische Causalität,' etc.,² is a polemic against what he calls the materialistic psychology, in which a causal relation is assumed between physical states and states of consciousness.

I really see no reason why one should not be frankly and outspokenly materialistic in a natural science. It is understood that the question about ultimate reality is not raised at all, and until this question is raised there is no metaphysic.

But it certainly comes to the same thing in science to say that a physical state is the universal antecedent, or the universal concomitant, or the cause of a given mental state. When consciousness is disordered because of an observable accident to the brain, one says the condition of the brain thus introduced is the cause of the disordered consciousness. There seems no more purpose in speaking of it as a merely parallel physical state which is, however, not a cause of a mental state, than to speak of a stroke of apoplexy and the bursting of a blood-vessel as parallel physical states, but not to be taken as causes of changes in consciousness. Epistemology and the higher criticism of concepts may ask in what sense the word 'cause' is here used, but if the psychologist can say that without the physical state, the mental state would not have occurred, he has enough ground for using the word 'cause' in a frank and practical way. But in doing so he will be raising no question about reality, he will simply be assuming that his phenomena are explainable by causal relations.

Thus the relations which the psychophysical point of view assumes are relations for the purpose of explanation, but it is an explanation within the limits of phenomena, and no metaphysical implications are permitted. The explanation is not an ultimate explanation; the triumph of the point of view would be to be brought around again into the mental series, to be able to predict the mental states from the physical ones. That is, the triumph would lie not in an explanation, but in a description, and this hope, this possibility it is which makes explanations important parts of scientific undertakings. The explanation which confessedly is no help to a new observation may be interesting, but it hardly seems important. And if it helps to a new observation it fulfills its function, whatever its concepts may be. There may indeed be a metaphysical concept of psychophysical parallelism, such a doctrine as that of Spinoza, for

¹ 'Logik,' Vol. II., 2te. Abtheilung, pp. 255, 257, 259.

² *Philosophische Studien*, Bd. X., Heft 1.

instance, but when the concept appears in psychology to-day, the presumption is that it is a point of view for the work in hand.

As an illustration of psychophysical parallelism on a very elaborate scale and of the distinction between description and explanation, I purpose to go somewhat at length into the principle work of Richard Avenarius, his '*Kritik der Reinen Erfahrung*.' I am the more disposed to this undertaking since Avenarius has, it seems to me, been very generally misunderstood, and I think unjustly.

III

I will say at once that the aim of the '*Kritik der Reinen Erfahrung*' is to be a contribution to natural science, and that it is not a system of metaphysics. The interest that it appeals to is primarily the interest in psychology; it appeals also to the interest in sociology and history.

That it should not have been so understood is explicable enough. The title reminds us of Kant. A '*Kritik der Reinen Erfahrung*' must, one thinks, have a good deal in common with the '*Kritik der Reinen Vernunft*.' Also, the author was a professor of philosophy at Zurich; his earlier works were a monograph on Spinoza and an attempt to define philosophy as the effort to conceive the world according to a mechanical principle. His later work, '*Der Menschliche Weltbegriff*,' had a good deal to say about idealism, and he himself was the editor of one of the principal philosophical quarterlies.

In view of these facts, one took up the '*Kritik der Reinen Erfahrung*' expecting to find, if not positive metaphysics, at least a criticism of metaphysical concepts. If we add to this a disposition to skip the notes in fine print, we have reasons enough for misunderstanding the work before us.

A remark which Avenarius makes in a note is a good introduction to his point of view. "As we have learned," he says, "to think of the nourishment of organisms, of their recovery from injuries and sickness, of their adaptations to changes in their environment without the intervention of the soul, so we have now to learn to think of the so-called purposive changes in the central nervous system without calling in a soul (*Geist*) to help explain, a soul whose own psychic changes would have to be first explained."¹

We may like this point of view or we may not; it is, in either case, an important psychological point of view at the present time. Psychology seeks to describe those mental activities which are its subject-matter by formulating laws of their occurrence and in making out psychophysical relations wherever they can be found, and

¹ '*Kr. der R. Erf.*,' I., p. 202.

it is felt that it would be to give up the whole task to admit a principle of original and arbitrary energy as a factor in the explanation. We constantly hear that this is materialism, and for one who does not distinguish between science and metaphysics it is materialism. But that distinction should, in the light of present-day discussion, be fairly obvious.

Avenarius undertakes to write a psychology of the processes of knowledge. Whether his psychology is a good one is a point for psychologists to decide. The important thing for us to notice is that the '*Kritik der Reinen Erfahrung*' is psychology.

There is at the outset a certain fund of information to build upon. Whatever our metaphysic may be, we 'know' in psychology that consciousness depends upon processes in the brain of some sort, that the nervous system is responsive to stimuli, that the whole body, and the nervous system as part of it, is constantly engaged in breaking down tissue, and is in need of appropriate nourishment and of periodical repose. We know that the organism and its parts are capable of exhaustion, and, within limits, of recovery from exhaustion. There is a teleological aspect of the reactions which the organism makes to a great many stimuli. This aspect it is which has given to the soul concept such a stubborn foothold in psychology. But though we are unable to make a psychological use of this concept, we may not, therefore, overlook the facts which it was intended to explain. We can observe, too, a certain rhythmical character in life as a whole and in many particular processes. The alternation of day and night occasions regular intervals of work and rest, with points of maximal vigor and fatigue, and transitions back and forth between them.

We are assured also that there is a region which we call the central nervous system which receives stimuli and determines reactions. We know, too, that the physiological system acquires habits and is capable of acquiring skill. These things depend upon processes of some sort in an organ, the brain, but upon what processes in particular we know hardly at all.

Can we conceive an organ of such a type as to account for enough of such phenomena as to make it a useful concept for psychological purposes? Avenarius thinks we can, and he proceeds to describe a central nervous system with such characters as would explain, he thinks, a great many phenomena in a psychological way.

Avenarius describes a way of apperceiving the central nervous system. Certain phenomena being given, there is wanted a concept to make them intelligible. Avenarius is, in so far, in the same position as the one who elaborates a system of atomic relations to account for chemical phenomena.

The central nervous system is called by Avenarius the System

C. This designation is chosen for purposes of convenience, and for limiting the discussion of the system C to those characters which he wishes to lay stress upon. The system C appears to be really the brain, but the word brain has many associations and suggestions which Avenarius wishes to leave out of account.

The system C is conceived as situated in the world among objects, from which it receives stimuli of various sorts, to many of which the reaction is a cognition. The undertaking is chiefly a psychology of cognitive experience, and accordingly non-cognitive reactions are left out of account. Avenarius states the situation as follows: "Let any part of our environment be in such a relation to human individuals that when the former is assumed, the latter state an experience; 'something is experienced, something is an experience or is a product of experience, or depends upon experience.'"¹

The statements of experience are called *E*-values, the stimuli themselves are called *R*-values (*Reiz*). An *E*-value depends directly not upon any *R*-value, but upon the system C, and any particular *E*-value is a consequence primarily of the constitution of *C* at the time when it gave expression to *E*.

Changes of some sort certainly take place in the brain. We say that tissue is broken down and built up. The process of wear and tear we believe to be due in great part, at least, to physiological excitations due to the world without. The rebuilding of tissue depends, we are sure, upon the blood-supply to the brain. We are familiar with feelings of exhaustion and of recovery of vigor, and we are reasonably sure that these feelings depend on corresponding conditions of the brain, and that between the condition which accompanies a loss of vigor and that which accompanies the feeling of restored vigor a series of states of the brain intervenes. We know also that there can be too much nourishment of the whole organism and presumably of the brain and we know that the excess can be worked off, that is, that a certain destruction of brain tissue brings back a normal condition of that organ, a point of balance between nourishment and work which we would preserve if we could. This ideal point of balance about which we seem continually to oscillate, Avenarius calls the '*Vitalerhaltungsmaximum*,' or the point of complete vital preservation. When that point is reached, the system C is in a state of stability. Such a point we do seem to pass and re-pass continually.

We may regard this condition of stability within *C* as the balance of two factors, one of them all those influences which make for the exhaustion of *C*, the other, the influences which make for the restoration and nourishment of *C*. The former of these, being the sum of

¹ 'Kr. der R. Erf.,' I, p. 3.

the R -values which play upon C and stimulate it to reactions, Avenarius calls $f(R)$. The other he calls $f(S)$.

And since the stability of C means that these two opposing factors are equal to each other and therefore nullify each other, Avenarius expresses the situation by the equation $f(R) = -f(S)$, or $f(R) + f(S) = 0$, which means that the result of the cooperation of $f(R)$ and $f(S)$ is that the system C does not depart from stability.

But if, starting with the system C in stability, we vary either $f(R)$ or $f(S)$, then it will no longer be true that $f(R) + f(S) = 0$. To the degree to which one of the factors has been altered, the system C has departed from a state of stability. There has ensued a 'Vital Difference' and this vital difference is the difference between $f(R)$ and $f(S)$. One of the two factors is more effective in its influence than the other, and the difference between the two opposed forces is the vital difference. Since one of the factors is regarded as negative as related to the other, the difference is thus expressed: $f(R) + f(S) > 0$. The equation $f(R) + f(S) = 0$ signifies that the vital difference has a value of zero, while the equation $f(R) + f(S) > 0$ signifies that the vital difference is greater than zero.

The system C , however, tends always to return to stability, and the process of return must be a process of annulling the vital difference. There is thus a transition from stability through a condition of instability characterized by the existence of a vital difference back to stability, where the vital difference is reduced to zero. This series of states from stability to stability, Avenarius calls a vital series.

The vital series as thus described is a series of changes in the system C . The reason for assuming such series of changes is that parallel series of conscious states can be observed. The process of attention is an example. We start from what we may call a condition of indifference, or rest, or stability, then something awakens our interest and we begin to attend to some sort of a problem. We continue in a state of indecision and doubt and perplexity, looking forward, however, toward the solution which we hope to find. At last the solution comes, and we are at peace with ourselves again.

Now if to the changes of consciousness there is a parallel series of brain-events, they must form a series, and since each term of the series must be adequate to its effect in consciousness, the physiological series may be described with reference to its dependent mental states, and its terms considered as bearing relations to one another similar to the relations and proportions in the consciousness series. This is not so empty or so metaphysical as it may sound. We take it for granted, in a general way, that of the changes in brain tissue

which produce changes in consciousness, the greater the one change the greater the other. And although the one series of changes is quantitative and the other qualitative, we do speak of a more and less, and carry on a good deal of comparison in the region of qualities. We have, in any case, a physiological series, and dependent upon this a series of mental states, or rather we have a continuous nervous process and a continuous stream of consciousness depending upon the former, and these continuous processes we can break up into parallel lengths, called vital series. The physiological series is called the Independent Vital Series, the series in consciousness is called the Dependent Vital Series.

It is unfortunate that the method of exposition chosen by Avenarius makes it appear superficially that the dependent vital series is deduced from the concept of the independent series, together with the general presuppositions, and that therefore nothing about the dependent series can be any better established than the concept of the independent series.

Obviously, however, the dependent series is a movement in consciousness which can be observed, and it is to account for these series of conscious states, which are data of experience, that the physiological series is assumed.

In the above case of an attention-process as a dependent vital series, three stages can be observed: first, the appearance of the problem; the awakening of interest and the consequent feeling of restlessness and dissatisfaction if the solution does not immediately appear. This is the 'Initial' stage; then comes the continued effort to solve the problem, the 'Medial' stage; and finally the appearance of the solution, characterized by satisfaction, abating anxiety, the settling down upon an opinion or a cognition. This is the 'Final' stage. Corresponding to these three stages of the dependent series are three stages of the independent series,—the appearance of the vital difference and a departure of the system C from stability, the continuance for a longer or shorter time with an approximately constant vital difference, and then the reduction of the vital difference to zero, with consequent return to stability.

The system C maintains itself by getting back to stability after disturbances. This functional activity can be performed in a way that is better or worse for the life of the system C itself, that is, we can conceive an ideal system C. Such an organ would, after any disturbance, return to stability with the shortest interval of a vital series. This would be accomplished if the system C were trained to recover stability by means of well-learned and completely habitual vital series, that is, if the system C by virtue of its liability to habit has learned to recover stability with maximum facility.

Now we are sure that the nervous system is subject to habit, and that this is one of the factors which is most important in making life well organized, in simplifying the mental outlook, in making experience coherent and developing a consistent will. Our point of view obliges us, therefore, to assume a parallel physiological development.

Certain independent (physiological) vital series thus become habitual, and the functional excellence of the system C is in proportion as the fund of habitual series is adequate to all the reactions of the system. Such an *'eingeübte'* series Avenarius calls a 'vital series of the first order.' Other series with a more or less novel character he calls 'vital series of a higher order.' Evidently the functional development of the system C lies in the reduction of series of higher orders to series of the first order. This means the gradual introduction of order into the behavior of the system C by means of its own education, if we may so describe it.

By habit we reduce the complex environment to its simplest terms. We learn to ignore large masses of it, or rather we react upon various manifolds according to certain constant characters or values which we find in them. If we translate this into physiological terms, it gives us a sort of physiological selection. The nervous system has become responsive to certain selected portions of its environment. That is, the education of the system C has been controlled by certain *R*-values to the exclusion of others. This concept of physiological habit is of the first importance in the theory of Avenarius, but it is so important because the fact of habit is of such great importance in life.

The consequence of habit is that experience becomes less and less diversified. All sorts of *E*-values no longer occur. In its effects upon experience, growth by habit is a process of exclusion, which, so far as the character of the system C is concerned, could go on indefinitely. It is a process by which the mind comes to give a final definite character to the manifold presented to it by the world, — a process by which a maximum experience of the world expresses itself in a resulting apperception of the world. This final apperception of the world depends upon the possession of a predicate which is applicable to every fact which experience testifies to as existent, and this means, in the terminology of Avenarius, that a final stage of the system C has been found by which any vital difference may be annulled. By virtue of its capacity for acquiring habits, the system C has found an answer to the question, 'What is everything?'

This idea of a limiting stage of the process of progressive determination of experience is, of course, only an idea, but it is not,

therefore, an insignificant idea. It is the concept of the natural limit of that kind of process which we are perfectly familiar with as habit.

It is easy to get the impression that every vital series must be started by an outer R -value. This, however, is not the case. If we recall the formula for stability, $f(R) + f(S) = 0$, we perceive that a vital series can be initiated by a variation of $f(S)$ as well as of $f(R)$.

The system C is, after all, the brain,—blood is being constantly supplied to it and its own complex constitution and energy must be a continual source of instability.

A judgment is an E -value. Judgments accordingly follow the same law of habit that all E -values follow. There is a progressive exclusion of possible judgments, a progressive definition of experience in the narrower sense, an evolution of pure experience by virtue of the law of habit. It is this evolution of pure experience in which Avenarius is primarily interested.

One has only to compare different civilizations and stages of culture to observe that the world may contain for one race and for one time very different objects of experience from those which it contains for another race or another time. Our own way of experiencing the world is certainly the outcome of an evolution. The discussion about possible objects of experience in the first section of this paper sought to make clear that almost anything can be an object of experience. We conceive of our experience to-day as being very much more valid, more adjusted to the facts of nature, more 'scientific' than the experience of our ancestors a few centuries back. We are disposed to think that we have awakened from credulity and superstition, and that we look out upon the world with a sane and critical observation. Perhaps we do, but it is interesting to note that experience has come to be what it is for the man of science among us as the result of the continual modification of a primitive and wholly uncritical experience.

About that primitive experience we, of course, know very little, but there is reason enough to suppose that it had a decidedly 'animistic' character. In that primitive stage of culture in our own prehistoric past no doubt many things could be objects of experience which could not be objects of our experience. There has been a progressive elimination of certain objects of experience, and a progressive enrichment of experience by the acquisition of other objects. When we are in an imaginative mood we sometimes lament that nature has lost for us the vivifying presence of the gods of the soil, the groves and the streams. But in a rationalizing mood, we say that we no longer introject into nature the likeness of ourselves.

We hold that our concept of nature is a valid concept, the product of critical and unbiased observation. Translated into the language of Avenarius, this means that our *E*-values correspond to our *R*-values. We say about nature only what she says about herself. The *E*-values which express primitive animistic experience are certainly decidedly different in some respects from those *E*-values which express the experience of a Helmholtz or a Huxley. Yet they are alike in being all *E*-values. Whether justly or not, we do speak of an enlightened scientific experience and contrast it with one that is relatively superstitious, and the enlightened experience, as well as the other, has its roots in that primitive experience which we may suppose to have been absolutely imaginative and credulous.

But few of us are accomplished men of science. Not every one has moved so far from the starting-point. And yet we may say that there is a large group of minds that take what we may call the scientific point of view, whose experience does not include mythological objects. Other minds, those that make up the great majority in our own civilization, while not distinguished by very consciously scientific points of view, do yet have an experience, more resembling the experience of a scientific mind than that of the primitive animistic mind. Yet there still remain, Avenarius thinks, some traces of the original fund of animistic objects. The further development of this idea, the description and criticism of the remnant of animism, has for Avenarius a special polemical interest, which would lead us too far aside to follow up. What Avenarius would have us observe is that the evolution of experience is still in progress, and that what lies ahead must be a continuation of what lies behind. The progress thus far has been the development of that concept of nature which natural science has come to regard as the proper one, and the very general elimination of animism. The continuance of the same process should mean the complete elimination of animism, making the modern concept of nature wholly consistent and the complete acceptance of the world so defined as an object of experience.

All this history of experience can be made the matter of a psychological study which should seek to describe the process from a psychophysical point of view. This is what Avenarius has done.

The line of thought by which Avenarius himself approached this problem helps somewhat to throw light on the definition of the problem itself as Avenarius understood it. Avenarius has expressed great indebtedness to Mach,¹ and his approval of the latter's 'Principle of Economy.' Mach has stated this principle in the following terms: "Science itself, therefore, may be regarded as a minimal problem, consisting of the completest possible presentment of facts

¹ 'Kr. der R. Erf.,' Vol. I., p. xiii; Vol. II., p. 492.

with the *least possible expenditure of thought*."¹ That is, the aim of science is to give such a conceptual description of experience as shall be most comprehensive and readily intelligible.

With this in mind let us make science the object of a psychological inquiry. It seems evident enough that the mind is an instrument for accomplishing purposes. It makes a difference to the organism whether the mind functions well or ill. But in attributing this teleological value to the mind, we have demanded two things. Not only must there be an organ to function in a purposive way, but this functioning must be carried out as well as the given conditions make possible. Other things being equal, that functional adjustment will be the best one which is made with the least expenditure of energy.

This may sound like an effort to translate psychology into pseudo mechanics, but I think there is really no mystery. No one would deny, I fancy, that, other things being equal, that adjustment of the organism is the best which is least exhausting to it. Vital energy, whatever that may be or depend upon (and I do not wish to imply any unique 'vital force'), is finite in quantity, so that it makes a great deal of difference whether our energy is wasted or not. But if we banish the concept of a 'vital force' and mean by force only what is meant in mechanics, and then undertake to give a psychophysical account of the way in which Mach's 'Principle of Economy' works, remembering that the idea of mechanical force is due to the sense of effort and energy in experience, it seems not inappropriate to find the mechanical equivalent of the principle of economy in the principle of least resistance. Accordingly, an early essay by Avenarius is entitled, 'Philosophy as Conceiving the World according to the Principle of Least Resistance.'

It may perhaps be said that this is an attempt to describe science itself as the line of least resistance, whereas science means effort, the expenditure of force. How much less is the effort involved in being indifferent to scientific problems! The man who cares nothing for science is, other things being equal, more economical, as regards his energy, than the eager scientist. Science is not, this view would hold, the line of least resistance, but a line of very great resistance.

This objection is, however, not so well founded as it seems to be at first glance. We find ourselves with a large program of theoretical interests on our hands. These interests are more or less lively attitudes on our part. We find ourselves responding to what interests us. We can not put the problems aside and be indifferent to them; they haunt us, and demand our attention. I am speaking, of course, of the men who care for problems, of the men who have

¹ "The Science of Mechanics," translated from 2d ed., Chicago, 1893, p. 490.

made science and philosophy and are making it. The need of solving a problem is a real practical need. How much science should we at present have if there had not been a large amount of that human restlessness, which we call interest, on matters of theory.

This scientific uneasiness depends upon a capacity for discovering problems and being worried by them. The presence of some unexplained, uncomprehended thing is a cause of effort, of striving, of using up energy. The energy is expended for a purpose, the solving of the problem; and of various solutions that may offer themselves that one is accepted as the best which calls for the smallest expenditure of energy. The elegant demonstration is the one which makes use of few resources. Clearness and transparency of method and result mean usually that relatively little effort is needed to understand them.

Let us admit then, for the purpose of this discussion, that the principle of economy is the guiding principle in science, and that the principle of least resistance is its parallel principle in nerve-tissue.

Every special science seeks to get what it might call a valid experience of its objects, and this means that it tries to get the objects pure and uncontaminated by any personal equation. No doubt the principle of economy leads, to a certain extent, to a misrepresentation of objects, but this is the ignoring of what is regarded as irrelevant from the point of view of the special interests, whereas a subjective enrichment of the object is the putting into it of what might make a difference in the description. This much seems clear, science feels at liberty to ignore as much detail in the objects as it is not interested in, but it denies the right to add anything.

Now if we admit that the special sciences are seeking to get their objects pure and if we imagine that there is a special science for each region of phenomena, and if we call this experience of pure objects a pure experience, then the special sciences are collectively aiming at a pure experience of the world.

This was the meaning of pure experience as Avenarius used the term in his *'Philosophie als Denken der Welt Gemäss dem Princip des Kleinsten Kraftmasses,'* and it is one of the meanings of the term in the *'Kritik der Reinen Erfahrung.'* But since such a pure experience is defined from an epistemological and not from a psychological point of view, the concept does not appear in the same form in the later work.

The special sciences are distributed, each to its own field. Within each field, novel facts are comprehended by reducing them to a group of known facts, which group undertakes to be as small as possible. In the same way the effort to understand the world would be the

effort to reduce to a single concept the characters, common to the pure experience, which the special sciences are able to secure. This effort, based upon the special sciences, to describe the common character of the whole world, is, says Avenarius, philosophy. It is the effort to answer the question, What is everything? With so much in mind, we are prepared to understand the following quotation: "In accordance with the principle of least resistance there is accomplished the reference of a single presentation to a general concept, and in so far as this presentation is strange and novel it is made known by this reference. Accordingly, conceptual understanding is a force-economizing, theoretical apprehension of an object, and the totality of objects will be most economically conceived, if they can be apprehended under one general concept. This effort to conceive the totality of objects with the minimum expenditure of force is philosophy. The all-comprehending concept must state what is common to all particular objects. This common aspect must be given in pure experience. Individual cases of pure experience are secured by means of observation in the special sciences, and the purification of experience, in general, results from the elimination of what is found to not really belong to the objects of experience."¹

It may appear that we are getting a good way from the system C and its vital series. The digression has its purpose, however, in that it will help us to understand the way in which Avenarius himself viewed his problem, by seeing that problem in its earlier stages.

Let us now connect the essay we have just been considering with an article by Avenarius entitled 'The Relation of Psychology to Philosophy.'² In the essay just considered, Avenarius describes philosophy as a certain kind of human effort, the effort to get a unified conception of the universe, to ask the question, What is everything? and to tell what it is.

This question, What is the nature of the world? How is the world constituted? is the question of philosophy. When this question is first asked, there is no doubt concerning our power to know how the world is constituted if we can only find it out. At the same time, psychology contributes little or nothing in giving shape to philosophy. Psychology hardly exists as an independent field, but forms a chapter in some system of metaphysics. The fate of metaphysical systems, however, contradictions discovered within and without, made the problem of knowledge more and more prominent, so that instead of the question, How is the world constituted? we have the question, How is the world known? When this question is first

¹ 'Philosophie als Denken der Welt,' p. 43.

² 'Ueber die Stellung der Psychologie zur Philosophie,' *Vierteljahrsschrift für Wissenschaftliche Philosophie*, I., p. 471.

critically asked reality is still attributed to objects which lie outside of experience, but great emphasis is laid upon the subjective factor in knowledge. It is taken for granted that perception does not give an object as it really is, that the whole content is not given in perception, but, on the other hand, it is assumed that the whole content given in perception does not really belong to the object. Objective reality is thus, at the same time, more and less than experience.

The original question, How is the world constituted? demands now a distinction between what can be taken as valid experience of objects and experience which misrepresents its objects. By this emphasis laid upon the problem of knowledge, and the recognition that the mind is so constituted as perhaps to interfere with its own cognitive purposes, psychology becomes of decided importance for philosophy, and it is not long before the world of real objects shrinks to a region of things in themselves, set over against forms of experience. It is a matter of recent history how the content of the world, which seemed to be lost on the objective side, was brought back from the subjective side, and how from this point of view the great systems of idealism grew up. But whether deservedly or not, those systems have fallen into disrepute, one factor in this situation being the progress of physical science. And to-day if one asks how we know the world, the scientist will point to his instruments for observation and experiment and say, 'With these we know the world.'

But knowledge secured by the aid of instruments for exact measurement is not the less subjective. Truer, perhaps, it would have been to say, 'By the use of these instruments do we conceive the world.'

The question, How is the world constituted? has become, provisionally at least, the question, How is the world conceived? And to this question one may now give a somewhat unexpected answer. The world is conceived by a nervous organism reacting in a certain way to its environment, and the question, How is the world conceived? becomes the question, How does this organism behave in conceiving the world? or, What kind of a natural process is philosophy? Philosophy is a certain type of human activity, and if one agrees that activities of thought depend upon processes in nervous tissue, one has a ground for asking, as a *scientist*, what sort of natural process philosophy is.

Avenarius undertakes to carry out frankly the psychophysical point of view. He conceives that types of experience depend upon typical processes within an organ. The organ he afterwards called by the name of 'System C' and its processes he sought to describe as 'Vital Series.'

This brings us back to the 'Kritik der Reinen Erfahrung,' but it brings us back prepared to observe the application of the method of the 'Kritik' to the description of philosophy as a natural process. If the question, 'How do we conceive the world?' in this new form can be answered with any measure of success, we may be able to reach some conclusions about the conditions on which the fate of systems of philosophy depends, and be able to state what conditions must be fulfilled by a philosophy which shall endure.

It was remarked above that the appearance of a problem means a certain restlessness on the part of him who sees the problem. We ought to distinguish between real problems and pretended problems. By real problems I mean questions that strike us as really problematic, questions whose solution one way or another makes a difference to us, questions which are problems not merely by virtue of a definition, but by virtue of the kind of interest they arouse. Besides the genuine problems there are problems which do not show any really problematic character. The problem about solipsism is a problem of this sort. A healthy man can not possibly find any *real problem* here. We may admit that the reality of other selves is problematic, but we shall be quite unable to experience the problematic character which we admit.

Progress in science and philosophy is largely due to a capacity for discovering real problems. Oriental peoples have this genius in a far less degree than Europeans. The problems of the Oriental consciousness are solved. Only the Western consciousness is tormented with doubts about reality, duty, the past and the future. Avenarius loves to dwell on the satisfaction and relief which the solution of a real problem affords, and on the teasing, restless, unsatisfied state which accompanies an unsolved real problem.

The distinction between the real problem and the artificial problem would appear to be a real and important distinction from the psychological point of view, where the purpose is an accurate description of experience. For this point of view, the so-called artificial problem is no problem at all. That is, its parallel brain-process can not be the one which gives rise to the problematic character. Accordingly, the word 'problem' will designate, in what remains to be said about Avenarius, always the real and genuine problem, the problem with the biological disturbance behind it. Evidently a philosophy which is to endure, which shall be, as Avenarius puts it, '*biologisch haltbar*,' must be an *E*-value or a group of *E*-values which express a permanent stability of the system C. These *E*-values have, in the process of physiological selection which marks the evolution of habit, come to prevail over other *E*-values. They have come to prevail because they represent the constant character of nature.

We find an analogue of such a brain-condition in the accomplished man of the world.¹ He is adjusted to all the situations he is liable to meet. Nothing surprises him or throws him out of composure. So long as the world remains the sort of place he has found it to be, he knows how to live in it, and how to adjust himself to its demands. And this attitude of adjustment is not a theoretical attitude; he does not have a theory about the world he *knows*; he has the certainty of *reine Erfahrung*. He has 'sized up' the world and knows what it is, and the world, as he understands it, is the world of his experience with nothing problematic about it. Such a final and definite comprehension of the world is, in the above case, evidently arrived at by a process of growth from something less mature, less *aufgeklärt*, and accordingly not well fitted to maintain itself in the face of a large and varied experience.

We have here an evolution of experience, and at the beginning we have a certain fund of convictions and experience and 'knowledge,' and at the end we have another fund of experience. Such a fund of experience Avenarius calls an '*Erkenntnissmenge*.' Evidently the second *Erkenntnissmenge* is obtained by a gradual modification of the first. In actual experience, we know well enough how this happens. The world does not correspond to our expectations and we have to make our expectations correspond to the world.

But what Avenarius wants is a comprehension of just this process in psychophysical terms. And the process to be comprehended is not the history of an individual system C.

Whatever *Weltbegriff* our remote ancestors may have had, it no doubt expressed their assurance about the world and not their doubts and problems concerning it. But, as we can observe, doubts and problems arose; the *E*-values of the *Weltbegriff* lost their qualities of existence, acquaintance and security, and became problematized. Or as Avenarius puts it, the 'world concept' turned into the 'world problem.' It was bound to do this, because the world had been conceived animistically by the imaginative projection into it of characters which it did not possess, while the system C has got to be formed by the real *R*-values and not by mythical ones.

But, as in the case of the man of the world, so here the goal of the process is the deliverance from illusion, the winning of a clarified idea of the world which is in accord with the facts.

But, some will exclaim, what kind of a system C will that be which can have a history like this, beginning in the dim past and reaching into the future?

At this point I take leave to recall the social basis of the concept of validity. Validity as a fact in actual experience, as a character

¹ I owe this illustration to Professor Royce.

of actual judgments, depends upon social agreement. If only one, or only a very few astronomers had been able to see spots on the sun, the judgment 'there are sun-spots' would have had no validity in science. The crank with his hobby may conceivably be right all the time, but such validity as his judgments might possess is something different from the validity which characterizes accepted judgments.

Just as science is not the private possession of any one individual, so a primitive view of the world is shared in common. But philosophical views of the world to-day can not be said to be held in common to any great extent. In so far philosophy is at a disadvantage as compared with science, for there is not enough agreement in philosophical judgments to give them the character validity.

We have thus a cooperation of different minds as the basis of validity. But from a psychophysical point of view this means the cooperation of different nervous systems, or a social system C . Such a system C as this can have a history which no individual could have. Avenarius calls such a system a 'Congregal System,' and represents it by the symbol ΣC .

Now it is easy to ridicule this concept, but it is unquestionably a perfectly legitimate one. It does describe the situation. The situation involves the psychophysical aspect of experience, the history and evolution of experience, and the fact that the education of an individual depends in the very highest degree upon his relations with other individuals, and that judgments about objective things derive their validity from social cooperation in these judgments.

It seems to me rather a proof of the value of the concept of the individual system C that it can be so readily extended to include all those individual systems which do determine one another in their judgments, and thus do really constitute a system.

By virtue of such a system as ΣC , the experience of one generation depends upon the experience of previous ones, and the process of eliminating the E -values which are not determined by R -values is made possible. These E -values which are to be got rid of represent the remnants of primitive animism, which was, of course, a falsification of nature by an imaginative introjective process. The heritage of animism which we have on our hands is, Avenarius thinks, the soul-concept and its consequences in philosophy.

The soul is conceived to be something *within* the body,—it is the basis of a literal distinction between inner and outer. The concept of the soul is, indeed, not prominent to-day, but the distinction between inner experience and outer experience, internal sense and external sense, is common enough. If there had been no soul-concept, the course of philosophy would no doubt have been very different from what it actually has been; it seems very probable that

there would have been no Kantian theory of the categories, and that we should not have seen Schopenhauer announcing as the most obvious of truisms that the world is my representation. By thus explaining idealism as the final result of the soul-concept which was itself a bit of introjection left over from the original animistic *reine Erfahrung*, Avenarius includes it among the *E*-values which will be eliminated in the course of the history of ΣC , if that history is not interrupted.

As the subjective additions to nature are eliminated from our view of the world, we approach a purely descriptive concept. We no longer speak of the world of our experience as the phenomenal world, while the real world is something else, we know not quite what. The world we observe is accepted as the real world, precisely as the plain man accepts it. And if we ask what the whole world is, our answer to this question will seek to state what the whole world has in common as the object of our clarified experience which has at last got the world pure. The judgment about the whole world will then state merely what can be observed by any one, and not what is the product of the poetic imagination of a few,—as when one says, everything is a bit of one absolute experience. The final *Weltbegriff* will express a knowledge of genuine *R*-values only, which affect the peripheral nerves. This concept of nature being the product of maximum experience will not be liable to variation.

I think it is clear enough in a general way what Avenarius is trying to state, although it is not always clear in detail. We have a historical process, the evolution of experience. This historical process has, as its first stage, a view of the world, which if put into words would tell simply how nature is experienced. This *Weltbegriff* describes what is *reine Erfahrung*. By constant variation the *Weltbegriff* comes to describe the world as it is not experienced. The actual experience of the world gives the lie to the 'critical' theory of it. The process approaches a *Weltbegriff* which describes the world as it is experienced. The experience which this view of the world asserts is an *E*-value and expresses such a 'final' state of the system *C* as can follow upon the presentation of any *R*-value.

As to the content of this *E*-value Avenarius can say only that it will be '*Vorgefundenes*.'¹ This may seem a poor outcome, but it means that the world is whatever it is observed to consist of. Trees are trees and houses are houses and clouds are clouds. They are not thoughts of God nor experience of the absolute nor phantasms of our own. There will be no effort to go behind what experience offers. Every single fact will be just this that we observe, the empirical fact before us. This is what Avenarius means by saying

¹ 'Der Menschliche Weltbegriff,' p. 114.

that the clarified and permanent *Weltbegriff* will declare, 'Everything is this.'¹ And is not this precisely the philosophy, or, if you prefer, the lack of it, of the 'plain man'? He it is that does full justice to the empirical diversity of the world. Science seeks to remove diversity by reducing things to common denominators. Metaphysics has not, since Aristotle at least, shown and disposition to recognize diversity. Possibly one should make an exception of Leibniz, but speaking generally, metaphysics has usually sought to absorb the empirical world with all its diversity and uniqueness into some form of an existent One, and there is much to suggest that this One is the mystic ONE of Neo-Platonism.

But the 'plain man' never pretends that one thing is like another except for practical purposes. For him the common feature throughout the world is the fact that everything in it is a 'this.' And if one must ask the question 'Was ist alles?' one can answer from the point of view of pure experience only 'Alles ist dies.'²

The 'Kritik der Reinen Erfahrung' really undertakes to describe the form of the evolution which our experience of the world has undergone and is still undergoing,—a form which might go along with one content or another. We should keep in mind that Avenarius is dealing with fact or with what we accept as equivalent to fact. We have the kind of experience that is expressed in what, following Avenarius, I have called 'the natural view of the world.' We have also the idealistic theory of reality, and this claims to be a scientific theory, and one which is more scientifically complete than any other metaphysic. But it describes reality in a way that obliges the man who does the actual work of making us acquainted with the world to assume a somewhat apologetic attitude.

We have also the fact that the actual idealism of history is a result of the fortunes of the idea of the soul and the idea of God, both of which must be assumed to have had entirely natural origins. This is, of course, no refutation of idealism, but it strengthens the presumption that something is wrong somewhere about the premises of idealism. The difficulty of making out just where the error lies may well be due to the fact that we are all bred up in the point of view which leads so logically into idealism. Avenarius saw on all hands a discontent with idealism, and I think it is fairly evident that this discontent has increased since Avenarius wrote, and is increasing.

¹ 'Kr. der R. Erf.', II., p. 376.

² L. c. Compare Professor Dewey in the *Journal of Philosophy, Psychology and Scientific Methods*, Vol. II., No. 15. "Experience is always of *thats*; and the most comprehensive and inclusive experience of the universe which the philosopher himself can obtain is the experience of a characteristic *that*."

The key to the logic of the situation has not yet been found, although I think the first step toward finding it has been taken.¹

'The dualistic discontent,' as Avenarius calls it, expresses a desire to conceive the world in a way corresponding to our natural experience of it. In view of the continuity of experience, such an evolution as that described by Avenarius seems, then, extremely plausible, when once attention is called to it.

We can not cast off all at once habits of mind cultivated by centuries of faith; they bind us in ways we can not name. But the theological tradition is giving way, and in proportion as it does, we come more and more to feel that the truth about the world is to be found in a complete description of its empirical content. It seems not at all unlikely that the theological tradition will in time cease to affect metaphysics, and that in consequence metaphysics will no longer give the lie to common sense. Of the metaphysics of this third stage Avenarius says only that it will be '*biologisch haltbar*.' He does not say it will be true.

If we are to understand by metaphysics the speculation which puts such stress on distinguishing 'appearance' from 'reality,' which defines reality as the source of appearance, a reality to some extent knowable but mostly unknowable, if metaphysics means this, Avenarius does seem to cast it ruthlessly overboard. As the task of philosophy he predicts that of stating the character common to all objects of experience. And for one who really occupies the pure experience position, and is not concerned with polemical attitudes toward any other, the common character of all objects of experience must be the most abstract, the most unimportant and the most uninteresting of predicates. Far more important and interesting will be what is concrete and actual.

To come back into the terminology of the '*Kritik der Reinen Erfahrung*,' the final view of the world will express a knowledge of genuine *R*-values only such as affect the system *C*. This concept of nature being the result of complete determination by habit, will not be liable to change.

Of course it is not meant that this final *Weltbegriff* is necessarily going to be attained, but only that the process is of such a kind as to have this for its limit. The process may be interrupted by a catastrophe at any moment.

I beg the reader not to accept this account of the views of Avenarius as anything more than a fragmentary one. I have cared very much more for the general purpose and outcome than for details of method and the system of terminology that is so characteristic.

¹ William James in the *Journal of Philosophy, Psychology and Scientific Methods*, Vol. I., No. 18, 'Does Consciousness Exist.'

IV

In the introduction to the 'Principles of Mechanics,' of Herz,¹ we find the following statement: "In endeavoring thus to draw inferences as to the future from the past, we always adopt the following process. We form for ourselves images or symbols of external objects, and the form which we give them is such that the necessary consequents of the images in thought are always the images of the necessary consequents in nature of the things pictured. . . . The images of which we here speak are our conceptions of things. With the things themselves they are in conformity in *one* important respect, viz., in satisfying the above-mentioned requirement. For our purpose it is not necessary that they should be in conformity with the things in any other respect whatever." The concepts must be 'permissible,' that is, logically self-consistent; they must be correct, or not contradicted by experience; and they must be appropriate, that is, embody the 'principle of economy.'²

Herz, thus, in agreement with Mach and Carl Pearson, describes the scientific concept as a construction of the investigator. It is an instrument with a function, that of leading to new observations and predicting sequences of phenomena.

This point of view is, however, radically opposed to the older view which defined its aim as the discovery of the real causes of observable phenomena. It was taken for granted that the phenomena of nature depended upon movements of matter,—and that matter in motion was a definite transcendent object of knowledge. The following from Helmholtz expresses this point of view. "The theoretical portion of physical science seeks to discover the unknown causes of events from their observable effects; it seeks to understand them according to the law of causality. We are forced to this task by the principle that every change in nature must have an adequate cause. . . . The final goal of the theoretical sciences is thus to discover the ultimate unchanging causes of changes in nature."³

Herz himself at one time predicted that the great problem of physical science would be the nature and the laws of the space-filling ether. "It seems more and more probable that this question will take precedence of all others."⁴ 'Herz spoke then wholly committed to old preconceptions,' says Kleinpeter in the article from which I take the quotation; and it goes without saying that Herz

¹ Translation by Jones and Walley, p. 1.

² *L. c.*, p. 2.

³ Helmholtz, 'Ueber die Erhaltung der Kraft,' p. 2, Berlin, 1847.

⁴ 'Ueber E. Mach's und H. Herz's Principielle Auffassung der Physik,' by Kleinpeter in *Archiv für Phil.*, II. Abtheilung, Bd. V., Heft. 2, p. 176.

had assumed a fundamentally different point of view when he wrote the 'Mechanics.'

Kirchhoff in the introduction to his 'Vorlesungen über Mathematische Physik' gives expression to the new point of view. He says: "The point of departure which I have chosen is not the ordinary one. It is customary to define mechanics as the science of forces, and forces as the causes which produce motion or *strive* to produce motion. . . . In the cause of the precision, which is, in other respects, characteristic of conclusions in mechanics, it seems desirable to get rid of ambiguous terms (*Dunkelheiten*) even if we are obliged to narrow the task of mechanics. I, therefore, propose, as this task, the *description* of the movements which occur in nature, a description as complete and as simple as possible."¹

One of the frankest statements that the scientific concept is a construction of the mind and not necessarily an image of transubjective things, is the prefatory note of Herz to book I. of his 'Mechanics.' It is as follows: "The subject-matter of the first book is completely independent of experience. All the assertions made are *a priori* in Kant's sense. They are based upon the laws of the internal intuition of, and upon the logical forms followed by, the person who makes the assertion; with his external experience they have no other connection than these intuitions and forms may have."²

The second book contains the application of the system of concepts to the phenomena of experience. The contrast and relationship between volume I. and volume II. of the 'Kritik der Reinen Erfahrung' are almost identical with that between books I. and II. of the 'Mechanics' of Herz. Avenarius would not and could not claim that the concepts and definitions which fill volume I. are entirely *a priori* constructions. But they are psychological inventions for the purposes of scientific apperception, inventions, however, which are adapted to the phenomena. But the lines of procedure of Herz and Avenarius seem very similar. Herz described scientific method as the formation and use of images or symbols of external objects such that 'the necessary consequents of the images in thought are always the images of the necessary consequents in nature of the things pictured.' Now critics of Avenarius have complained of the dialectical way in which his 'Kritik' develops; but such a character is inevitable if there are to be any consequences of the symbol which shall be symbols of facts. Whether Avenarius has met with any success in this effort, whether his outcome is really a logical consequence of his symbol, or whether it could have been stated with-

¹ Vol. I., p. iii.

² P. 45.

out any reference to a system C and its determination by recurrent vital series, is a decision which lies outside the present undertaking. I am disposed to believe that the results which Avenarius finally reached were won partly by means of his symbol. When we have all three groups, the concepts, the phenomena of experience and the final conclusions and statements, we can, perhaps, say that the latter group needed only the group of experience-facts to produce it. But if a group of concepts are of assistance of any sort in reaching conclusions, the concepts have served their purpose, whatever critics may think of them.

The efforts of Kirchhoff, of Herz, and I may say of Avenarius, show the effort to eliminate explanation from science as an ultimate goal, and to limit its task to description which shall be as simple and as complete as possible. But from this point of view it is not pretended that science is a statement of nature's eternal truths, and, as Kleinpeter observes, it follows that there is for humanity 'no objective truth enthroned above gods and men, as the ancient Greeks imagined.'

We admit readily the wisdom of this point of view, and yet some of us are sure to feel not quite satisfied. Science does well indeed to get rid of metaphysics, to accept its method as method and not as revelation. Yet a Veritas there must be, we say, and by what right does science forbid us to seek it because she seeks something else?

If we look for the essentially logical distinction between the two points of view above indicated, between that which seeks a knowledge of ultimate causes, and that which seeks complete and economical descriptions, we observe that it is in the existential judgment, which is present in the older point of view, while absent in the later one. It is evident, also, that the older point of view, therefore, is a metaphysical point of view. The great rôle which materialism played thirty and forty years ago was an inevitable result of the great triumphs of physical science, when physicists defined the goal of their science as metaphysical insight, insight into the eternal laws of the movements of matter of which all change in the world is the resulting effect.

It is no doubt more intelligent to recognize science as the effort to describe experience rather than to try to regard it as explaining experience in any ultimate sense. Yet many will feel that the older point of view had a more substantial purpose than the new one. It at least was seeking the Veritas which must exist. We might not like materialism, but the science of that faith was a courageous science not afraid of the truth wherever it might be found.

He who feels this attitude longs for the existential judgment. His mood is not satisfied with science as now defined; description is not enough, and he demands the explanation of experience. The experience which is to be explained is the experience with some of whose aspects we became acquainted in the first section of this paper. It is experience characterized by the outer world and the fellow man as transcendent objects,—in a word, by the natural view of the world.

THE EXPLANATION OF EXPERIENCE

I

IN the work of describing experience, by far the greater part of the subject-matter belongs to the outer world. The complete program of the undertaking to describe all experience would be the classification of the sciences, which provide the tasks for many minds working together.

But the fellow man is more than a cooperator in description. He has the peculiar function of providing the basis for validity. We are accustomed to say that scientific conclusions must have universal validity, by which we mean acceptability to all observers who care to verify the conclusions, or to such a majority of them that the dissenters can be ignored.

But in explanations of experience, which are of an ultimate type, the fellow being appears to occupy a somewhat different position. In philosophy, the postulate is still made, no doubt, that agreement between different observers of the given situation is possible, philosophical discussion would have no meaning without it; but practically such agreement is not expected, certainly not from all observers of the situation, even though they be all pronounced entirely competent. Yet every philosophy undertakes to be valid, and expects to secure some measure of validity whether it meet with approval or not.

Science aims at universally verifiable descriptions of phenomena. The question whether the description is a valid one is equivalent to the question whether the description fulfills the scientific purpose, whether it is universally verifiable. Metaphysics, on the other hand, asks the question, What is reality? What is the ultimate ground of phenomena? What is the ultimate cause of experience? The question, Does reality consist of matter with a molecular structure? does not mean, Is the concept of the molecule so useful as to lead to universally verifiable descriptions of phenomena? The question as to the molecular constitution of reality is a question which seeks not acquaintance with phenomena, but a knowledge of something underlying phenomena, and expressing itself through phenomena. The question as to the validity of a metaphysical judgment is a question whether the judgment fulfills the metaphysical purpose or not, and this purpose is not universal verifiability, but a true report about the ultimate ground and cause of experience.

Of course the actual fate of philosophical systems depends upon the degree to which they can win the other type of validity, by commending themselves to students of philosophical problems. Every philosophy seeks this type of validity and is fortunate to the degree that it secures it, but the validity it aims at is of another type, although practically this validity may have to submit to the same test as the other one.

Philosophical explanations are sure to be determined by the aspect of experience that seems most significant, most interesting. Those who are chiefly interested in the natural and exact sciences, and charmed with the conceptual regularity and order which is characteristic of large regions in those sciences, have usually defined reality from the point of view of this prevailing interest. The goal of natural science as described by Helmholtz is an expression of this point of view.

But explanation from the side of the interest in natural science is giving way to description.¹ Statements like that of Helmholtz, quoted above, sound already a little antiquated. Explanations of experience are, therefore, coming more to be determined by the other chief factor in the natural view of the world, namely, the fellow being. Reality must be so understood as to be an adequate ground for the social aspect of experience. From the side of this interest, the dramatic aspects of human experience and human history are cared for. Moral and esthetic experience, the problem of evil, personality, are important headings. But the explanation which takes special account of these interests must not do too great violence to the other feature of the natural *Weltbegriff*, the outer world. The significance of my fellow depends largely upon the fact that we are supposed to have common interests and common objects, and the sphere for these must be preserved.

II

We can approach the explanation of experience by an indefinite number of ways. Every metaphysic is an attempt to explain experience. It seeks not to describe phenomena, but to get behind phenomena to some ultimate ground, and the experience to be explained presents as its most characteristic feature the cognition of apparently transcendent objects. This character, which comes out most frankly in the naïve realism which I have called the natural view of the world, appears to determine metaphysics more than any other character of experience. Sir W. Hamilton testifies to this character in the following vigorous statement. "We are immediately

¹ See preface to second edition of Carl Pearson's 'Grammar of Science.'

conscious in perception of an ego and a non-ego, known together and known in contrast to each other. This is the fact of the duality of consciousness. It is clear and manifest. When I concentrate my attention in the simplest act of perception, I return from my observation with the most irresistible conviction of two facts, or rather two branches of the same fact; that I am and that something different from me exists."¹ "The ego and non-ego, mind and matter, are given together." This fact is 'clear and manifest.'

I am not now asking whether there is any truth in these statements. I simply call attention to the fact that when a philosopher harks back to the plain testimony of consciousness, this is what he harks back to. I think Hamilton was prevented by a philosophical theory from going quite far enough. Certainly the ego which normal consciousness testifies to in 'the simplest act of perception' is usually just the body, and if one is very much interested in something objective, the perception of the ego will not form part of the experience at all.

Mill, although unable to be quite so frank as Hamilton, still retains the transcendent object as something whose existence is too evident to be questioned. "I believe that Calcutta exists," he says, "though I do not perceive it, and that it would still exist if every percipient inhabitant were suddenly to leave the place or be struck dead."² Calcutta would still be real under these circumstances, for it would remain 'a permanent possibility of sensation.' If the inhabitants return or come to life again, they will perceive Calcutta, and Calcutta was there all the time waiting to be perceived. So Mill reflects.

This 'possibility of sensation' is the classic entrance to the idealism which claims to explain experience in a really profound and consistent way. What, it is asked, is an object of experience while it is mere possibility of sensation? What kind of a positive fact is Calcutta while it is waiting to be perceived? It appears to be taken for granted that it is all the time a 'possibility' of experience, but that if it is really anything at all, it must be something more. The same sturdy instinctive realism which both Hamilton and Mill represent, appears in this request for a further account of the possibility of sensation.

Suppose one were to reply that not even the possibility of sensation exists in the sense in which Mill spoke of it. One could answer, experimentally at least, that so long as Calcutta is not perceived or thought about by human minds, Calcutta simply does not exist. One who made this answer would, no doubt, hasten to add

¹ 'Lectures on Metaphysics,' Boston, 1859, p. 200.

² 'Examination of Hamilton,' p. 246, New York, 1884.

that of course he did not really believe it, that he suggested this reply in order to observe what the logical results might be. And as for the few who might make this reply in all sincerity, some of these would save the transcendent character of Calcutta by declaring it to be an object in an eternal experience, and the others would, I am sure, feel that something was wrong, and that the transcendent character should be gotten back somehow. The 'dualistic discontent' makes itself felt when we undertake to define the world as a series of dissolving views. And yet why not? That is the way the world flows by before us. One view melts into another with enough consistency and a good deal of predictability.

But we will none of such sophistry. The changing view is all characterized as more than view. The realistic bias so characteristic of our human nature demands permanence and stability. Moreover, one might feel obliged to be consistent and thoroughgoing, and then our fellows would dissolve away together with the views to which they belong, and against this we set a stubborn face. But the material outer world is probably able to take care of itself even without the help of the fellow being; our reality-functions see to it that the world remains, even in idealism, a transcendent object, so far as any one finite mind is concerned.

The transcendence-character must somehow be preserved, for it is preserving it to translate it into something permanent in an experience, which is outside the limits of what I recognize just now as mine. This motive is contributed by the outer world character of experience. Another important motive there is in the fellow being, not so much in the external aspect he presents by appearing in the outer world, as by his being a fellow. As such, he is the condition of all our ethical attitudes, and of everything that gives the deeper value and significance to life. His presence lays a significant demand upon the outer world. External objects must be the same objects for him and for me. That is made the test of their reality as external objects. But most important of all is it that the fellow being remain a transcendent object. Yet how, then, can there be one and the same outer world for us both? It would seem as though his outer world must exist in a different space from mine and in a different time. In fact, it seems as though in one universe there were room for only one self. This is really, it seems to me, the clinching argument for idealism, and it is one that the critics of that doctrine, and those who prove to us the actual transcendent existence of the world, hardly notice. These philosophers take all their illustrations from a one-object-one-subject relation, whereas the case of realism can not be proved without making clear the one-object-two-subjects relation.

The idealist is prepared to handle this difficulty, by declaring that the relation of one object to two subjects is a mythical relation. Of course there is in one universe room for only one self, and when your experience and mine and the object are all absorbed into this absolute experience, we get the one-subject-one-object relation back again. Do we indeed know of any experience analogous to the absorption of the experience of me and my fellows into one, in such a way as to comprehend them both, yet leave to each its individuality? On a small and trivial scale, we do. If I seize some object, a book, with both hands, the book which I grasp with my right hand is the same book as the one I grasp with my left. There is for the experience of grasping simply the one experienced object, because the touch-sensations of both hands, and the visual elements in the total perception are all brought together in one experience. For the same reason, the space through which my right hand swings is a part of the same space as that through which my left hand swings. In cases of alternating personality, in what intelligible empirical sense is the world of one of these selves the same world as that of the other self? The illustration of grasping the book shows that any external object can be kept one by defining it as the object within one experience. This logical necessity contradicts, of course, the plain testimony of pure experience, and as pure experience is the sole ground of good theory, and as logical contradictions proceed from definitions, one is justified in suspecting that the idealistic implications are begged somewhere in a definition. But realism can certainly have no logical standing until this petitio is pointed out.

But whatever means we resort to to explain experience, we adopt some concept and attach to it the existential predicate and seek thus to deproblematize the situation. We are seeking an experience with the fidential-character, the character of '*Heimhaftigkeit*,' as Avenarius called it, and, in fact, the presence of ultimate problems is often testified to in language that breathes an acute tone of '*Heimweh*.' The search for truth is indeed the search for a satisfied will, but the truth which we find may remain the truth for ten minutes or for a lifetime.

But science, too, seeks to deproblematize a situation by means of a concept, only science does not attach the existential predicate. Just in this matter of the existential judgment, metaphysics goes beyond science. Science does not deny that there is an ultimate truth, but she does not claim to have found it. She is very likely to say that it can not be found. Science has a system of concepts of which the necessary consequences are images of the actual effects and expressions of the ultimate ground of things. Science

says that phenomena are as if reality were thus and so, as if the world of matter had a molecular structure, as if space were filled with a vibrating ether, and, with the attention directed upon experience of another sort, she might say, as if each finite human life were a moment in an absolute life which comprised all of reality.

If such a concept as the Absolute were a useful concept in getting a synthetic sense of experience of a certain type, or in helping to describe it, or in making one a more sensitive and appreciative observer of this experience, then the concept of the Absolute would have precisely the same validity as the concept of the atom. Both could dwell side by side in science very well.

Yet anxious ones cry out, "But the Veritas! The reality back of phenomena! The something which completes my fragmentary experience and answers my questions! No mere acquaintance with phenomena, however wide, can be to me a substitute for this deeper insight."

What, precisely, are the motives because of which we search for something back of phenomena and demand a deeper insight? But before taking up this question let us recall what actual truth and error appear to be, that experience, namely, which is called the possession of truth, and that experience which is called the possession of error.

There is no test of truth other than the removal of the problematic character from the content about which a true judgment is desired,—and the possession of truth, as a case of experience, can be in no wise distinguished from the possession of a deproblematized content.

If this content happen to break out into a problem again, then the temporary peace and satisfaction of the will must be pronounced an error. And then another truth may be found, or the same truth may turn out to be true after all. Is a given conclusion a valid one? The question is an inquiry whether the conclusion has got rid of the problem-character and continues deproblematized. 'Yes, the conclusion is valid,' means that the conclusion has not yet shown itself to be unsatisfactory. Or, 'No, that conclusion was an error,' means that the conclusion in question has lost the character of sameness which made it appear as a true account of certain facts, the same as the facts, in some respects, and has taken on a quality of otherness, so that one now has to observe, 'No, the facts are certainly not like that, it was an erroneous account of them.' The possibility of error thus means the possibility of experience which shall include in it the contradiction of a previous cognitive experience. To say that error is or is not possible in any given case is to predict something about the future.

If one simply observes the situation one is obliged, I think, to

report it somewhat as I have done. Of course it takes an effort to mean by truth, error, and validity merely these characters of experience. The primitive realism which is such a sturdy growth within us causes us to try to mean something very different by truth, error and validity. But when we get these facts into our experience, what we have is experience, with the fidential character.

When we read the pages of certain philosophers of the past we can not doubt that to them some objects were assured experienced facts, which to-day have to be proved by elaborate dialectical methods. Thus Descartes appeals to his idea of God as to the idea of something that could not possibly be doubted in any moment of sanity. Spinoza gives the impression even more strongly of being a man in whose experience God is an established and simply unquestionable reality. He could probably no more have doubted the existence of God than the 'plain man' doubts the existence of the outer world.

It seems hardly possible that the concept of God should appear in modern philosophical literature with the complete fidential character which it appears to have had with Descartes and Spinoza. But that does not mean that we have learned to question the existence of a ground of things back of phenomena. Philosophy still regards the visible and tangible world as a secondary quality of endless variety. We speak of change and the necessity of some ground of change, of fragmentary experience and the necessity of its completion, of thought and its 'Other' which exists even now before it is found as deproblem-
atized experience.

As a mere suggestion, a hint, I recall the way in which Avenarius accounts for Idealism as a prevailing point of view in philosophy. The suggestion is that the search for an ultimate ground of experience, especially a spiritual ground with dramatic consequences, is a stirring of the old animistic habit within us.

But as to the motives which cause metaphysics to pass beyond science and attach the existential predicate to the useful concept, these may be many and different. We still hear now and then that the existence of God is assured in the necessity of a first cause. In reputable philosophical literature we do not now often meet with the concept of an efficient cause of the world, but the idea of a final cause lurks in all teleological metaphysics. The historical influence of the Christian conception of God would provide one motive for still seeking a ground of phenomena.

The intellectual interest in the dialectical problems, the exercise of thinking and of imagination, which is always attractive, and the sense of being engaged in very important undertakings, is another motive or group of motives.

As a statement of a third motive, I will quote a sentence from

Professor Ladd's work.¹ "The construction of a tenable and comforting philosophy is a work of good-will; it is a beneficent deed, a gift of blessing to humanity." And the dedication: "To those who have the faith of reason in its strivings to know the deeper truth of things."

Now I would not be understood as not sharing in the faith of reason or in the longing for the existential judgment. But at present it interests me to stand aside and view the varied spectacle of philosophical effort. Experience itself in its diversity, the description of experience, and the explanation of experience, help to make up that spectacle. Even he who enters eagerly into the work of description or explanation can but observe the situation before him and report what he can see. If he does more, he mutilates the facts which he has undertaken to describe in their integrity. And there is much to suggest that the philosopher is not the mere spectator nearly so often as he should be.

It is sometimes said that the function of idealism is to make men feel at home in the world. Some lines of Professor Seth are such an apt testimony on this point that I can not resist quoting them: "Metaphysically, idealism is opposed most ordinarily to materialism; in the widest sense it is the opposite of what may be called the mechanical and atheistic view of the universe, whatever special form that may take. Is self-conscious thought with its ideal ends,—the True, the Beautiful, the Good,—the self-realizing End that works in changes and makes it evolution? or are these but the casual outcome of a mechanical system?—a system in its ultimate essence indifferent to the results which in its gyrations it has unwittingly created, and will as unwittingly destroy? Is thought or matter the prius? Is the ultimate essence and cause of all things only 'dust that rises up and is lightly laid again,' or is it the Eternal Love of Dante's Vision,—'the love that moves the sun and the other stars'? That is the fundamental metaphysical antithesis. If we embrace the one alternative, however we may clothe it in detail, we recognize the universe as our home, and we may have a religion; if we embrace the other, then the spirit of man is indeed homeless in an alien world."²

We have here, I think, a sufficient explanation of the longing for the existential judgment. The existential judgment is needed to deproblematize the situation. Of course the emotional need is not always stated quite so frankly, but it frequently appears in a philosophy as its efficient cause. The philosophy of Spinoza is as clearly an adjustment to the emotional values of his world as were the deeds of Saint

¹ 'A Theory of Reality,' New York, 1899, p. 33.

² *Phil. Review*, Vol. I., p. 140.

Francis. Even Kant, who nearly always displays the ideal philosophical temper, lets one see that his course is determined by his valuation of moral character. Fichte is evidently, in all his work, responding to a moral enthusiasm, defining reality so as to adapt it to emotional needs.

Not all metaphysicians, however, have been determined in their philosophy by religious cravings. Many an imagination loves to play with cosmic themes, and what it produces is a work of art.

Metaphysics is, like all knowledge laboriously attained, the response which has been made to demands for cognitive satisfaction. The demand is, of course, the expression of a temperament and may show a religious or an esthetic character. It may show, too, what we are obliged to call the purely intellectual character, where the cognitive satisfaction which is sought is a delight in knowing, in relating ideas, in building up an ideal system of thought which charms by its order and completeness. A superb example of this type is Aristotle.

I ask above for the motives which makes metaphysics insist upon the existential judgment, and I have indicated certain emotional needs which demand this satisfaction. Actually, however, the existential judgment is so characteristic of metaphysics because until very recently it was equally characteristic of science, and the motives which are driving it out of science have not yet made themselves felt in philosophy. This critical attitude in science has not yet become very general, but we can not doubt that it will become rapidly authoritative. A point of view which leaves to science full scope to carry on its tasks, and defines those tasks in such a way as to eliminate metaphysics, or at least to reduce the metaphysical presuppositions to a minimum, is sure to be most welcome. And this point of view, when it comes to be regarded as the only point of view for science, when the definition of the goal of science as the knowledge of the unchanging original causes of phenomena comes to be looked back upon as something quite antiquated and outgrown, may have important consequences for metaphysics.

Metaphysics, as we saw, is the response to interests of rather different types. It undertakes to satisfy certain emotional needs of a religious or semireligious character, and it ministers to the purely intellectual and esthetic delight in noble ideal constructions. To the former of these two classes of interest, the existential judgment must always be indispensable. It is not evident why it should be indispensable to the latter. The latter type of mind is ever admitted to be the more scientific of the two. And supposing that the concepts of science, the atom, the molecule, the ether, etc., are recognized and claimed as nothing but conceptual instruments for extending our acquaintance with nature, and the idea of the atom or of the ether as an

image of 'reality' is remembered as a notion surprisingly naïve, is it not altogether likely that minds of the purely intellectual type, which devote themselves to problems about an ultimate reality, may feel disposed to regard their concepts as science regards hers?

For the example of science in such ways is authoritative. Metaphysics has become very eager to be 'scientific,' in all possible ways, and there is no reason to suppose that the methods of science will be less alluring than formerly.

Well,—if this happens (and the new epistemology of science makes it seem not unlikely)—if it comes to pass that the concepts of God, the Absolute, the Unknowable, the concept of reality itself as something distinguished from appearance, should be looked upon as working hypotheses, then a long step would have been taken toward the clarified experience which Avenarius sought to describe as the limit of the evolution of experience.

But then these concepts must do one of two things. They must either (1) lead to new observations by proving convenient instruments of description, for a working hypothesis must work, or (2) they must attempt to describe something which is confessedly removed from all possible observation. In the former case metaphysics becomes a natural science, in the latter case it is difficult to see that metaphysics remains anything at all. For that which is removed from all possible observation is no longer accepted without question as existing, and this concept of reality is itself a working hypothesis used, it may be said, to make phenomena intelligible, by which is meant, however, to make them dramatically interesting.

But, it may be said, there will still be those who refuse to surrender the existential judgment. They will keep metaphysics true to its ancient function, the search for reality behind appearance.

No doubt they will, but it is a question of how much honor will be paid to their literature. Of course speculations as to the future are generally idle, but we have here certain definite data. We have, I think, the beginning of a new epistemological situation of a perfectly statable kind, and we have a large amount of experience showing the recent growing dependence of philosophy upon the special sciences. This dependence is growing ever greater. See such definitions of philosophy as that given by Wundt, in which philosophy is expected to follow behind the special sciences, collecting, organizing and criticizing their results. And if the existential predicate as applied to the working concept comes to be regarded by scientists as an evidence of medieval simplicity, it will be but natural, the prestige of science being what it is, and growing ever greater, that this new epistemology should be adopted by the more critical students

of philosophy. More and more the search for reality behind appearance would seem like a monkish dream.

This might be a great catastrophe for human knowledge and experience, but nature permits catastrophes.

And if it should come to pass? Well,—we should then have science and our natural view of the world.

To put it as briefly as possible, science is interested in contents, and aims at getting more content. The existential predicate adds nothing to the definable content, therefore science has no interest in the existential predicate. By what interest then is the existential predicate demanded? Not by an interest in contents that are in any way statable, therefore by an interest in contents that are unutterable. For it can not be denied that the predicate of existence does enrich the total content, but it does so in unutterable ways. And the interest in the unutterable is a purely emotional interest.

The relation between science and metaphysics as above described is strikingly like that situation in the Middle Ages which brought forth the doctrine of the twofold truth. This doctrine was first stated in the interest of religion, but its effect was to liberate scientific speculation, and to protect religion so well that theology occupied, more and more, a position of dignified but somewhat lonesome aloofness. If now we are told that a proposition can be true in science and false in metaphysics, and *vice versa*, one really can not be blamed for detecting in the 'fringe' a feeling of prophecy.

SUGGESTIONS TOWARD A CONCEPT OF EXPERIENCE

ARE we in a position to bring together any suggestions toward a concept of experience? Let us see.

Experience is, for our purpose, cognitive experience of objects,—experience in the narrower and more precise sense. And the objects of experience are characterizations of experience, objects which may or may not be mythological objects.

The most important character of experience is the real outer world as a permanent transcendent object, or totality of objects, which contains certain objects of peculiar interest, my fellows, who in turn experience the same outer realities that I do.

This presence before me and about me of a real outer world and fellow beings like myself is a character of my experience. It is also a character of my experience that the experience of my fellows (those who are sane) has the same character as mine.

The possibility that this natural view of the world should ever cease to be a character of experience seems too remote to make it worth entertaining; the few cases we can observe where this has happened have been cases in which there was a profound disorganization of functions.

Other objects of experience are, however, observed to come or to disappear. But these variable objects appear to depend not merely upon the individual, but upon the social relations, current beliefs and attitudes, the '*Erkenntnismenge*' in which the individual grows up.

Experience is, therefore, not an individual fact, but a social fact, focussed in individuals but forming a system. The limits of this system must be arbitrarily defined, but within the system the experience of the individual is determined as regards a great deal of its cognitive character by the '*Erkenntnismenge*' of the whole.

This social system of experience has a history; the common fund of objects of experience is known to change. Certain objects or characters are eliminated by other objects or characters which replace them. Thus the sun as an object of experience which revolved about the earth has been replaced by the sun as an object of experience about which the earth revolves in an elliptical orbit. Other objects or characters are eliminated and not replaced. These are objects of the animistic type. I know an Egyptian dragoman who was terrified at hearing a lady under his guidance speak slightly of the water of the Nile for drinking purposes. He feared the Nile would hear and

take its revenge. The historical current of experience to which we belong has no doubt included objects like this, but they have disappeared from our own system of experience. Mythological objects have been eliminated to a very great extent, and new objects, or new characters of objects, are brought into the system and described as the objects of a scientific knowledge of nature.

All experience shows the psychophysical aspect; therefore experience as a social system must show the same aspect. It is becoming more and more plausible that consciousness depends upon processes in brain-tissue, and therefore the system of experience must be regarded as depending upon an elaborate system of nervous substance. This physiological system has been represented by the symbol ΣC . And if the changes in the '*Erkenntnismenge*' of a system of experience are the effects of processes in ΣC the history of experience must depend upon a parallel history of ΣC .

The psychophysical aspect, however, is an aspect with which only the psychologist need be especially concerned. But to the extent that the psychophysical aspect of experience comes under consideration, actual experience must be regarded as depending upon ΣC in its relations with outer stimuli.

The evolution of experience still continues. What lies ahead may be expected to render the concept of nature more complete and definite and to further the elimination of mythological objects.

This concept of experience is an instrument for conceptual synthesis. Other concepts are equally possible. The one which I suggest proceeds from the standpoint of the natural view of the world, and accepts its data from all sources whence information can be obtained. The concept is suggested in the interest of the study of history. The author of this concept is Richard Avenarius.

AN EMPIRICAL DEFINITION OF CONSCIOUSNESS

IN beginning this final chapter I can but refer to certain recent articles which seek to improve our empirical accounts of perception and knowledge.¹ My own effort is in the spirit of the writers I refer to, and especially have I felt encouraged by the articles of Professor James.

Professor James explains at the outset that he does not deny the existence of everything we may suitably call consciousness. The function of knowing is not to be denied, and for this function the name consciousness can be retained. He does deny the existence of any 'entity' or 'aboriginal stuff or quality of being contrasted with that of which material objects are made, out of which our thoughts of them are made.'²

Now, it is a merely verbal matter, but for my own present purpose I am going to call this function of knowing simply knowing or knowledge, and I am going to use the word consciousness to signify another fact or group of facts equally real. It is for the reader to decide whether my use is justified.

As creatures of habit we say that there are things and there is awareness of things, that there are objects and that there is consciousness of objects. Any fact to which I attend becomes straightway an object, and every object, we say, must have a subject. This subject can not be my body, for that is another object. The subject must be something far more subtle, namely, consciousness.

'Must be,' we say, not 'is.' The sincere empiricist may well be suspicious of 'must-bes.' His first business is to see what the empirical situation contains, not what a definition implies. In what follows I try to report a strictly empirical content, leaving out all 'must-bes.'

It sounds like an innocent and an intelligible proposition to say that I see the chair on the other side of the room. If, however, I mean that an inspection of the situation as experienced reveals any detail of the content that can be called 'seeing' as distinct from the visual chair, and other objects in the shape of sensations of head,

¹ Professor William James in *The Journal of Philosophy, Psychology and Scientific Methods*, Vol. I., Nos. 18, 20, 21; Vol. II., No. 2. Professor Frederick J. E. Woodbridge, in the same journal, Vol. II., No. 5. Ralph Barton Perry, in *The Psychological Review* for July, 1904.

² *Journal of Phil., Psy. and Sci. Methods*, Vol. I., p. 478.

throat and body, this commonplace statement is false. The situation contains not seeing, but visual and other objects, and if I am interested in the object on the other side of the room in such a way as to make me oblivious of myself, the situation as just then experienced by me contains no seer.

It is easy to understand, however, why we say 'I see the chair' and think we have a feeling of doing something. Owing to acts of mine, the content is constantly changing, I am continually doing things in order that particular contents may exist, as when I travel and take great pains to see all the picture-galleries, or all the Gothic architecture, that I can. And when I at last have come to something that I have long and eagerly wished to see, there may be such a lively pleasure and such a sense of purpose fulfilled that I say to myself, 'Now you are beholding it, now you have really got the experience you have been longing for.' In these cases an empirical ego is present, but it is another object in the field of experience.

This sense of personal efficiency expresses itself in a sentence having its subject in the first person and a verb in the active voice and, in the example used, the visual object in the accusative case. And now applying this manner of words to the simple case of 'seeing' the chair, we get what seems to me a very bad piece of psychology. The situation may contain ego elements and non-ego elements, but these are all objects within the content; and anything like a sense of effort or strain which might be called a feeling of the act of perception is simply another object which would be grouped among the ego elements. But in most normal cases (introspection is an abnormal case) there is simply the presence of the thing 'perceived.' When I look up, there is the chair and that seems to be the whole story. The chair is there before me, but I can discover no consciousness of it. The sound of the electric car is out there in the street, but there is no consciousness of it. There is the odor from a lamp, but consciousness of the odor does not accompany it.

The field of experience contains objects of endless variety,—trees, buildings, sensations, pains, pleasures, hopes, fears, mathematical relations and logical necessities. But in no case of knowledge does an empirical inspection discover the object plus consciousness of it. If we mean, then, by consciousness something observable over and above the brute fact that the object is there wherever it is, we certainly mean what no observation can discover.

It may strengthen this conviction to reflect that the idea of consciousness is probably, as Professor James says, 'the faint rumor left behind by the disappearing soul upon the air of philosophy.' We speak of states of consciousness; our psychologizing forefathers spoke

of states of the soul and meant the same thing. We instinctively feel that consciousness is an inner thing rather than an outer one, and if now the tendencies pointed out by Professor James, and his own declarations mean that consciousness as a metaphysical concept is on the point of being dropped, and that with it goes the last bit of animism, does it not seem an unexpected verification of an important part of the theory of Avenarius? Avenarius calls the metaphysical idea of consciousness the last stage of animism,¹ and says, 'am besten wärs man gäbe einen so verfänglichen Ausdruck ganz auf.'² Naturally it is of particular interest to see whether consequences for idealism are likely to follow the new attitude toward consciousness.

And first, it does not seem to me that we should regard consciousness as a bad word. We can continue to use it to mean what we have really always meant by it, namely, what is essentially private to one observer. That there is a great mass of experience which is essentially private and is thus contrasted with what is public, is the basis of the familiar distinction between the inner and the outer world. Private objects are what we may intelligibly call subjective facts. For an object to be subjective is for it to be private. Now by any case of consciousness we mean what is equivalent to a mental state, and 'the fact that our mental states are incapable of observation by anybody but ourselves seems to be not an accidental, but an essential character of these mental states.'³

In adopting this criterion of privacy, I am glad to find myself in agreement with Professor Münsterberg, who writes: "The most general condition which characterizes a psychical fact is that it can be experienced by only one, and that as object it stands to the subject in the relation of mere capacity to be experienced (*Erfahrbarkeit*); it is distinguished from physical facts by the circumstance that these can be experienced by more than one. . . ."⁴

The privacy character is, I think, not really different from the one advanced by Dr. Perry in his article 'Conceptions and Misconceptions of Consciousness.' Dr. Perry describes cognitive experience precisely as I have done.⁵ The earlier judgment which is pronounced error by a later one, is thereby viewed as idiosyncrasy or confusion. Such rejected convictions are 'definitely recognized as my experience.'⁶ "There is no experience of which one may not

¹ 'M. Weltbegriff,' p. 106.

² *L. c.*, p. 132, note 67. Compare 'Kr. der R. Erf.,' I., p. viii and p. 22.

³ Royce, 'Outline of Psychology,' p. 4.

⁴ 'Grundzüge der Psychologie,' p. 202.

⁵ *Psychological Review* for July, 1904, pp. 285-6-7.

⁶ Dr. Perry's article, p. 284.

come to say 'it is my state or it is your state.''¹ "The most unequivocal instance is the dream."²

So long as we keep within the limits of the experience of one mind, this seems to me a very adequate account of the matter, but the judgments with which scientists as such are concerned are judgments in which they have a common interest, and in which validity means the support of corroborative agreement. In the case of the single mind, the earlier judgment loses validity as soon as it loses verification by subsequent judgments. The individual who can not obtain the assent of other observers finds his judgment classified as idiosyncrasy.

It seems to me a very misleading analysis which does not take into account the necessity of verification by other minds, at least, if we mean to be empirical, and if we are discussing that type of judgment which is a judgment in science. Now that cognitive experience which for itself is rational and full of insight, yet which a later judgment of the same mind, or a judgment of another mind, characterizes as whimsical, is what the criticizing mind can not get hold of and make its own. It remains the private experience of another, a mental state, a state of consciousness. The experience that is 'definitely recognized as *my experience*' and presents a 'for-me relation,' and is best illustrated by the case of a dream, is so manifestly characterized by its essential privacy and limitation to one observer, that Dr. Perry's excellent account can lose nothing by accepting privacy as the characteristic property of consciousness rather than idiosyncrasy and error, and idiosyncrasy appears naturally as privacy as soon as other minds are taken into account. And error, in science, is the fact of rejection by other observers. What is rejected is the decision of a cognitive experience, and it is rejected simply because it is not shared, for if it were shared it would be not rejected, but affirmed.

In what I said above about the great variety of objects and the universal absence of any type of object that can be called consciousness of them, I find myself in substantial agreement with Professor Woodbridge,³ and I can not see that I really differ from him in proposing to use the word consciousness in a different sense.

Professor Woodbridge expresses greater confidence in saying what consciousness is not than in saying what it is. It is not 'a kind of receptacle' into which things can get. It is not, as the idealist be-

¹ *L. c.*, p. 289.

² *L. c.*, p. 287.

³ 'The Nature of Consciousness.' A paper read before the American Philosophical Association, December 29, 1904, and published in the *Journal of Phil., Psy. and Sci. Methods*, Vol. II., No. 5.

